Environment

CREDERE ASSOCIATES, LLC

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May 18, 2011

Ms. Kimberly N. Tisa
Regional PCB Coordinator
Office of Ecosystem Protection
Environmental Protection Agency Region 1
5 Post Office Square, Suite 100
Mail Code: OSRR07-2
Boston, Massachusetts 02109-3912

Subject: Site Characterization and PCB Cleanup Plan

Former Sullivan School

45 School Street, Berwick, Maine

Dear Ms. Tisa:

On behalf of Sullivan School Associates LP, Credere Associates, LLC (Credere) respectfully requests approval for the following proposed plan to address polychlorinated biphenyls (PCB) detected at the former Sullivan School located at 45 School Street in Berwick, Maine, hereinafter, the "subject property."

This plan has been prepared to remove identified PCB Bulk Product Waste in accordance with an alternative decontamination approval tendered under 40 CFR 761.79(h) and dispose of this waste in accordance with 40 CFR 761.62(a). In addition, approval is requested to dispose and verify the removal of bulk materials with PCB concentrations greater than 1 mg/kg, which are the result of impact by identified PCB Bulk Product Wastes, in accordance with 40 CFR 761.61(a) and 40 CFR 761.61(c). Areas at the subject property which have been identified to contain PCB Bulk Product Waste and/or bulk materials with PCB concentrations greater than 1 mg/kg as a result of impact by PCB Bulk Product Wastes are hereinafter defined as the "Site." Procedures and regulations cited in this report are consistent with those included in 40 CFR 761 and presented by EPA Region 1. If there are any questions, please contact the undersigned.

Respectfully Submitted, CREDERE ASSOCIATES, LLC

Jedd S. Steinglass

Senior Project Manager

cc:

Nathan Bateman, Bateman Partners, LLC

Gordon Fuller, Maine DEP

Keith Trefethen, Town Manager and Health Officer, Town of Berwick

Robert I. Patten, P.E., L.S.P., LEEP-AP Vice President



Site Characterization and PCB Cleanup Plan

Former Sullivan School Site 45 School Street Berwick, Maine

Prepared for:

Bateman Partners, LLC

245 Commercial Street Portland, Maine 04101

May 18, 2011

Submitted by:

Credere Associates, LLC

776 Main Street Westbrook, Maine 04092

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- Appendix B Initial Laboratory Data, Laboratory QA/QC, Methods, and Chain of Custody
- **Appendix C** Site Ownership Information
- **Appendix D** Standard Operating Procedures
- **Appendix E -** Site Characterization Laboratory Data, Laboratory QA/QC, Methods, and Chain of Custody



1. SITE OVERVIEW

1.1 BACKGROUND

The Former Sullivan School was operated as a public school from approximately 1872 until approximately 2004. Prior to the construction of the current building, two older school buildings were present in the same location. These buildings were reportedly destroyed by fire in 1894 and 1927.

The central section of the current subject property building is the oldest portion, being constructed in 1927. This three-story portion of the building is composed primarily of brick with wooden floors and plaster over masonry walls and plaster ceilings. Two wings were added to the north and south sides of the original building in 1959 and 1961, respectively. Each of these two-story wings extends past the rear of the original building forming a courtyard on the northwest side of the building. These wings are constructed of concrete block with brick façade and contain concrete block walls, vinyl tile and painted poured concrete floors, and mineral fiber tile ceilings.

A Site Locus Plan is included for reference as **Figure 1**.

No workers, students, or other individuals are currently present at the subject property for any significant duration. The subject property building is locked and secure with access controlled by the Town of Berwick. However, the proposed reuse scenario includes renovation and redevelopment as workforce housing by Sullivan School Associates, LP. Anticipated tasks in order to complete the redevelopment include the demolition of a portion of the subject property building, the comprehensive renovation of remaining areas, and the construction of an addition.

The current owner of the subject property is the Town of Berwick. However, Sullivan School Associates, LP intends to purchase the subject property for the duration of the remediation and redevelopment, and then transfer the property back to the Town of Berwick. From that point forward, Sullivan School Associates, LP would operate and manage the subject property under a long-term lease.

Prior to the initiation of proposed redevelopment activities at the subject property, Credere directed an investigation of potential hazardous building materials. This investigation included radon, asbestos, and lead-based paint surveys and a limited initial sampling protocol to identify the presence of potential polychlorinated biphenyl (PCB) Bulk Product Waste.

Based on previous project experience, Credere conducted an inventory of suspect PCB-containing building materials at the subject property, including paint, caulking, sealants, grout, mastic, glazing, and insulation. Consistent with this inventory and the results of previous investigations at similar sites, 20 samples that were determined to have a reasonable likelihood of containing PCBs were collected and analyzed.



In accordance with the above, 20 initial samples, including 15 paint samples and 5 samples of representative caulking/glazing/expansion joint material, were obtained from the subject property on February 17, 2001. These initial samples were submitted to Spectrum Analytical, Incorporated (Spectrum), an independent EPA-certified analytical laboratory located in Agawam, Massachusetts for analysis of PCBs by EPA Method 8082 using manual Soxhlet extraction Method 3540. Based on the results of this initial sampling, no concentrations of PCBs were identified in caulking/glazing/expansion joint material collected from the subject property building in excess of 1 mg/kg. As such, these materials are not included as a potential PCB Bulk Product Wastes at the subject property. However, the collected initial paint samples contained concentrations of PCBs ranging from less than the method detection limit to 1,010 mg/kg. Based on these initial analytical results, and as no other source or evidence of a release of PCBs was identified within the subject property building, paint located at the subject property with PCB concentrations which are greater than or equal to 50 mg/kg are considered to represent PCB Bulk Product Waste as defined at 40 CFR 761.3.

Initial sample locations are depicted on **Figures 2** though **4**. Site photographs are included as **Appendix A** and a copy of the initial laboratory analytical results is included as **Appendix B**.

1.2 SITE PARAMETERS

Coordinates: Latitude 43° 16' 07.5" N Longitude 70° 51' 41.0" W

UTM 4,792,349 Meters N UTM 348,941 Meters E (Zone 19)

Ownership: The subject property is currently owned by the Town of Berwick, Maine.

However, the ownership entity during the remedial actions will be Sullivan

School Associates, LP. Contact information is included as Appendix C.

Occupancy

& Use: The subject property is currently vacant. Formerly, the subject property was

occupied by the Sullivan School and used as a public day school.

Adjacent

Properties: The subject property is located near the commercial and industrial center of

Berwick. Adjoining and/or adjacent properties include the following:

North: The subject property is bordered to the north by the Berwick Police

Station.

East: The subject property is bordered to the east by School Street, beyond

which are residential properties.

South: The subject property is bordered to the south by residential properties and

a church.



West: The subject property is bordered to the west by undeveloped land, beyond which are residential and commercial properties.

Surrounding Receptors:

The Maine DEP Geographic Information System (GIS) Environmental and Geographic Analysis Database (EGAD)

(http://www.maine.gov/dep/gis/datamaps/index.htm#EGAD) was reviewed via the Maine DEP GoogleTM Earth application for the Site and surrounding area on May 2, 2011. According to the EGAD, the subject property is not located within an environmentally sensitive area and no public or private drinking water supply sources are located within 0.5 miles of the Site. The Salmon Falls River is situated approximately 1,400 feet southwest of the subject property and a designated sand and gravel aquifer is located approximately 3,000 feet northwest of the subject property. No additional relevant features were noted within a 0.5-mile radius of the subject property.



2. SITE CHARACTERIZATION

Based on the reported concentrations of PCBs in initial paint samples collected from the subject property on March 17, 2011, Credere personnel conducted additional Site Characterization¹ activities between April 12 and May 11, 2011. This work was conducted in order to characterize and determine the appropriate disposal method for PCB Bulk Product Waste² and potentially PCB-impacted bulk materials which could be generated during proposed renovation activities. Credere collected representative samples of bulk products and/or the underlying porous surfaces for PCB analysis from a total of 101 representative locations at the subject property. The methodology employed during sample collection was designed to distinguish between: 1) potential PCB Bulk Product Waste, 2) impacted bulk materials which contain concentrations of PCBs as a result of contact with PCB Bulk Product Waste, 3) Excluded PCB Products³, and 4) unregulated materials.

During Site Characterization activities, Credere ensured that each sample was collected from the matrix in question and adjacent products (i.e. sheetrock, wood, brick, or separately applied paint layers) were excluded from the aliquot. This method was used to minimize the possibility that potentially regulated PCB concentrations were diluted by unrelated materials. Copies of the Standard Operating Procedures used during Site Characterization activities are included as **Appendix D**.

2.1 PCB BULK PRODUCT WASTE SAMPLING

2.1.1 Paint Sampling

Credere personnel collected paint chip samples from 93 representative locations at the subject property. These samples were obtained to characterize different types of paint located within and along interior and exterior portions of the building. Paint samples were obtained from select walls, floors, and ceilings. Consistent with observed conditions, the majority of the paint applications displayed no indication of potential dilution (i.e. multiple paint layers), though where potential dilution was noted, samples were obtained from each discrete layer for analysis. Credere personnel utilized dedicated paint scrapers to collect a minimum of 10 grams of paint per sample. The paint chip samples were collected in accordance with the EPA *Standard Operation Procedure* (SOP) *for Sampling Porous Surfaces for PCBs* and EPA *SOP No. 2011 for Chip, Wipe, and Sweep Sampling.* The paint chip samples were submitted to Spectrum for analysis of PCBs by EPA Method 8082 using manual Soxhlet extraction Method 3540.

2.1.2 Mastic Sampling

As a conservative measure, one representative sample of mastic associated with vinyl tile flooring material was collected. Credere personnel utilized dedicated paint scrapers and cutting

³ As defined at 40 CFR 761.3





¹ Site Characterization Activities were conducted in general accordance with 40 CFR 761.61(a)

² As defined at 40 CFR 761.3

tools to collect a minimum of 10 grams of material. Sampling was conducted in accordance with the EPA SOP for Sampling Porous Surfaces for PCBs and EPA SOP No. 2011 for Chip, Wipe, and Sweep Sampling. The mastic sample was submitted to Spectrum for analysis of PCBs by EPA Method 8082 using manual Soxhlet extraction Method 3540.

2.2 BULK MATERIAL SAMPLING

2.2.1 Concrete

Credere personnel collected bulk samples of porous materials underlying select paint samples from two locations. This sampling was conducted to determine if bulk materials located at the Site had been impacted by concentrations of PCBs contained within the identified PCB Bulk Product Waste. The sampling of this material was limited due to time constraints and the assumption that porous bulk materials located below identified PCB Bulk Product Waste would be completely removed during cleanup activities.

Prior to sample collection, Credere personnel removed paint from the sample surface to reduce the possibility of cross-contamination. The samples were then collected in accordance with the EPA Region I *Draft SOP for Sampling Concrete in the Field*. Credere personnel collected the bulk material samples using an impact hammer drill, dedicated 0.5-inch masonry drill bits, and dedicated scoopulas to collect a minimum of 10 grams of material from the sampling surface to 0.5-inches below grade. The bulk material samples were submitted to Spectrum for analysis of PCBs by EPA Method 8082 using manual Soxhlet extraction Method 3540.

2.2.2 Vertical Delineation

As areas of the subject property in which PCB Bulk Product Waste paint were identified are either scheduled for demolition or consist of materials that may be completely removed with relative ease, vertical delineation sampling within the concrete floor and brick walls was not conducted.

2.3 QUALITY ASSURANCE / QUALITY CONTROL SAMPLING

Throughout the Site Characterization activities, Credere followed quality assurance / quality control (QA/QC) procedures described in the *EPA Region I Draft Standard Operating Procedure for Sampling Concrete in the Field.* Credere's QA/QC program included the collection of five blind co-located field duplicate samples, identified as Dup-01 through Dup-05. These samples were obtained during Site Characterization activities conduced on April 12 and 26, 2011 and were submitted to Spectrum for analysis of PCBs by EPA Method 8082 using manual Soxhlet extraction Method 3540.

2.4 LABORATORY ANALYTICAL RESULTS

Results of laboratory analysis of bulk product and bulk material samples collected between February 17 and May 11, 2011 are summarized below in **Table 1**. A copy of the original



laboratory data, laboratory QA/QC, methods, and chain of custody forms are presented in **Appendices B** and **E**. Sample locations and total PCB concentrations are depicted on **Figures 2** though **4**.



	Table 1 - Site Characterization Results Summary						
Sample ID	Material Description	Substrate	Sample Location	Sample Date	Analysis Date	Surrogate Recovery ¹	Total PCBs ²
BM- 1	Matte White Wall Paint Behind Lockers	Brick	Hallway-01	3/17/2011	3/23/2011	85/70	40.00
BM- 2	Yellow Wall Paint Behind Lockers	Brick	Hallway-01	3/17/2011	3/23/2011	130/90	52.30
BM- 3	Gray Wall Paint	Brick	Boiler-01	3/17/2011	3/23/2011	43/42	1.72
BM- 4	White Wall Paint	Brick	Boiler-01	3/17/2011	3/23/2011	98/64	< 0.104
BM- 5	Dark Green Floor Paint	Concrete	Boiler-01	3/17/2011	3/23/2011	139/111	6.38
BM- 6	Light Gray Floor Paint	Concrete	BA-04	3/17/2011	3/23/2011	126/84	7.07
BM- 7	Glossy White Wall Paint	Brick	BA-04	3/17/2011	3/23/2011	142/73	3.95
BM- 8	Dark Green Floor Paint	Metal Stairs	North Stairs-01	3/17/2011	3/23/2011	142/135	6.36
BM- 9	Black Wall Paint	Plaster	Class-09	3/17/2011	3/23/2011	202 /149	4.14
BM- 10	Light Blue Wall Paint	Plaster	Class-06	3/17/2011	3/23/2011	115/97	8.02
BM- 11	White Wall Paint	Concrete Block	Gym-01	3/17/2011	3/23/2011	123/91	1.02
BM- 12	Medium Gray Bottom Layer Floor Paint	Concrete	Boys-02	3/17/2011	3/23/2011	Diluted ³	1,430.00
BM- 13	Dark Blue Wall Paint	Plaster	Class-20	3/17/2011	3/23/2011	148/99	7.52
BM- 14	White Ceiling Paint	Metal Built-Up Roof	Gym-01	3/17/2011	3/23/2011	131/82	0.48
BM- 15	Medium Gray Floor Paint	Concrete	Class-03	3/17/2011	3/23/2011	Diluted ³	1,080.00
BM- 16	White Exterior Expansion Joint	Brick	Hallway-01	3/17/2011	3/23/2011	144/111	0.36
BM- 17	Light Gray Exterior Window Caulk	Brick	Class-02	3/17/2011	3/23/2011	120/116	<0.169
BM- 18	Dark Gray Exterior Door Caulk	Brick	Shop-02	3/17/2011	3/23/2011	820/95	< 0.950
BM- 19	White Exterior Window Glazing	Metal Window	Boiler-02	3/17/2011	3/23/2011	139/114	< 0.195
BM- 20	Dark Brown Exterior Door Caulk	Concrete Block	Gym-01	3/17/2011	3/23/2011	125/92	< 0.964
BM- 21	Light Blue Wall Paint	Concrete	BA-01	4/12/2011	4/23/2011	132/119	< 0.101
BM- 22	White Wall Paint	Concrete	BA-01	4/12/2011	4/20/2011	131/114	< 0.101
BM- 23	Green Floor Paint	Concrete	BA-01	4/12/2011	4/20/2011	97/99	5.16
BM- 24	White Ceiling Paint	Plaster	BA-01	4/12/2011	4/23/2011	121/101	7.84
BM- 25	White Wall Paint	Brick	Hallway-07	4/12/2011	4/20/2011	97/92	12.50
BM- 26	Yellow Wall Paint	Brick	Hallway-07	4/12/2011	4/20/2011	98/80	7.68
BM- 27	Dark Green Top Layer Floor Paint	Light Gray Floor Paint	Hallway-07	4/12/2011	4/20/2011	103/82	5.76
BM- 28	Light Gray Mid Layer Floor Paint	Green Floor Paint	Hallway-07	4/12/2011	4/20/2011	107/102	6.05

	Table 1 - Site Characterization Results Summary						
Sample ID	Material Description	Substrate	Sample Location	Sample Date	Analysis Date	Surrogate Recovery ¹	Total PCBs ²
BM- 29	Green Bottom Layer Floor Paint	Concrete	Hallway-07	4/12/2011	4/20/2011	114/95	9.05
BM- 30	White Wall Paint	Brick	Boiler-02	4/12/2011	4/20/2011	139/132	< 0.097
BM- 31	Light Blue Wall Paint	Brick	Boiler-02	4/12/2011	4/20/2011	94/50	< 0.093
BM- 32	Dark Green Floor Paint	Concrete	Boiler-02	4/12/2011	4/20/2011	92/100	4.36
BM- 33	Yellow Wall Paint	Brick	BA-03	4/12/2011	4/23/2011	117/95	5.54
BM- 34	Light Gray Ceiling Paint	Plaster	BA-03	4/12/2011	4/20/2011	90/71	7.01
BM- 35	Light Gray Floor Paint	Concrete	BA-04	4/12/2011	4/20/2011	82/68	2.92
BM- 36	Dark Blue Wall Paint	Brick	BA-04	4/12/2011	4/20/2011	111/116	5.29
BM- 37	Dark Blue Wall Paint	Concrete Block	Boys-02	4/12/2011	4/20/2011	78/91	6.98
BM- 38	White Wall Paint	Concrete Block	Boys-02	4/12/2011	4/20/2011	94/95	5.25
BM- 39	Bright Green Wall Paint	Concrete Block	Girls-01	4/12/2011	4/22/2011	108/101	4.09
BM- 40	White Ceiling Paint	Plaster	Girls-01	4/12/2011	4/22/2011	132/117	3.13
BM- 41	Light Gray Floor Paint	Concrete	Gym-03	4/12/2011	4/22/2011	104/109	2.78
BM- 42	Light Gray Floor Paint	Concrete	Gym-04	4/12/2011	4/22/2011	135/93	4.30
BM- 43	Medium Gray Floor Paint	Concrete	Gym-05	4/12/2011	4/25/2011	105/70	39.20
BM- 44	Yellow Wall Paint	Concrete Block	Gym-03	4/12/2011	4/22/2011	137/93	1.51
BM- 45	Light Gray Floor Paint	Concrete	Gym-02	4/12/2011	4/22/2011	125/93	0.54
BM- 46	Purple Wall Paint	Concrete Block	Gym-01	4/12/2011	4/22/2011	91/85	0.87
BM- 47	Yellow Wall Paint	Brick	Hallway-02	4/12/2011	4/22/2011	113/95	5.09
BM- 48	White Wall Paint	Brick	Hallway-02	4/12/2011	4/22/2011	106/105	3.32
BM- 49	Yellow Wall Paint	Brick	Hallway-02	4/12/2011	4/22/2011	107/121	4.28
BM- 50	White Wall Paint	Brick	Hallway-02	4/12/2011	4/22/2011	106/126	2.98
BM- 51	White Wall Paint	Brick	Hallway-01	4/12/2011	4/22/2011	103/121	15.32
BM- 52	Yellow Wall Paint	Brick	Hallway-01	4/12/2011	4/23/2011	124/89	8.28
BM- 53	White Wall Paint	Concrete Block	Hallway-01	4/12/2011	4/23/2011	98/112	9.91
BM- 54	Yellow Wall Paint	Concrete Block	Hallway-01	4/12/2011	4/23/2011	111/140	14.95
BM- 55	Light Green Wall Paint	Concrete Block	Class-01	4/12/2011	4/23/2011	125/94	12.60
BM- 56	Medium Gray Floor Paint	Concrete	Shop-01	4/12/2011	4/25/2011	Diluted ³	726.00
BM- 57	Medium Gray Floor Paint	Concrete	Shop-02	4/12/2011	4/25/2011	Diluted ³	1,420.00
BM- 58	White Wall Paint	Brick	North Stairs-01	4/12/2011	4/23/2011	87/98	12.26
BM- 59	Concrete	Soil	Class-03	4/12/2011	4/21/2011	114/131	6.78
BM- 60	Concrete	Soil	Boys-02	4/12/2011	4/21/2011	122/113	12.90



	Table 1 - Site Characterization Results Summary						
Sample ID	Material Description	Substrate	Sample Location	Sample Date	Analysis Date	Surrogate Recovery ¹	Total PCBs ²
BM- 61	White Wall Paint	Plaster	Hallway-03	4/12/2011	4/22/2011	120/116	8.07
BM- 62	Yellow Wall Paint	Plaster	Hallway-03	4/12/2011	4/22/2011	126/138	9.98
BM- 63	Mixture of Green and Light Gray Floor Paint	Concrete	Boys-01	4/12/2011	4/22/2011	95/101	<0.142
BM- 64	Light Gray Bottom Layer Floor Paint	Concrete	Boys-01	4/12/2011	4/22/2011	97/95	18.30
BM- 65	White Wall Paint over Light Aqua Green Paint	Concrete	Class-03	4/12/2011	4/25/2011	95/95	66.40
BM- 66	Yellow Wall Paint	Brick	North Stairs-02	4/12/2011	4/22/2011	121/130	14.37
BM- 67	White Wall Paint	Brick	North Stairs-02	4/12/2011	4/22/2011	139/121	9.89
BM- 68	Dark Green Floor Paint	Metal Stairs	North Stairs-02	4/12/2011	4/22/2011	149/133	10.00
BM- 69	White Wall Paint	Brick	Hallway-05	4/12/2011	4/22/2011	145/102	10.80
BM- 70	Yellow Wall Paint	Brick	Hallway-05	4/12/2011	4/22/2011	116/107	13.56
BM- 71	Dark Blue Wall Paint	Concrete Block	Class-12	4/12/2011	4/22/2011	91/98	2.32
BM- 72	Light Green Wall Paint	Concrete Block	Class-14	4/12/2011	4/22/2011	100/104	3.03
BM- 73	Dark Red Exterior Wall Paint	Concrete Block	Gym-05	4/12/2011	4/22/2011	125/117	< 0.0916
BM- 74	Yellow Wall Paint Next to Lockers	Brick	Hallway-01	4/26/2011	5/4/2011	100/75	28.50
BM- 75	White Wall Paint Next to Lockers	Brick	Hallway-01	4/26/2011	5/4/2011	125/200	34.30
BM- 76	White Wall Paint Above Lockers	Brick	Hallway-01	4/26/2011	5/4/2011	125/200	42.30
BM- 77	Yellow Wall Paint	Concrete Block	Hallway-01	4/26/2011	5/4/2011	100/100	23.70
BM- 78	White Wall Paint	Concrete Block	Hallway-01	4/26/2011	5/4/2011	125/125	46.00
BM- 79	White Wall Paint	Concrete Block	Shop-02	4/26/2011	5/5/2011	Diluted ³	247.00
BM - 80	White Wall Paint	Concrete Block	Shop-01	4/26/2011	5/4/2011	125/ <i>351</i>	63.80
BM- 81	White Wall Paint	Concrete Block	Class-03	4/26/2011	5/4/2011	100/225	110.00
BM- 82	White Wall Paint over Light Aqua Green Paint	Plaster	Class-11	4/26/2011	5/6/2011	280/280	9.04
BM- 83	Yellow Wall Paint	Brick	South Stairs-01	4/26/2011	5/4/2011	100/125	5.33
BM- 84	White Wall Paint	Brick	South Stairs-01	4/26/2011	5/4/2011	75/125	5.35
BM- 85	Medium Gray Floor Paint	Concrete	Gym-05	4/26/2011	5/4/2011	100/125	39.30
BM- 86	Medium Gray Floor Paint	Concrete	Gym-05	4/26/2011	5/4/2011	100/100	61.90
BM- 87	Light Gray Floor Paint	Concrete	BA-04	4/26/2011	5/4/2011	100/125	4.40
BM- 88	White Wall Paint	Brick	Hallway-06	4/26/2011	5/4/2011	125/125	3.86
BM- 89	Yellow Wall Paint	Brick	Hallway-06	4/26/2011	5/4/2011	100/125	5.97



	Table 1 - Site Characterization Results Summary						
Sample ID	Material Description	Substrate	Sample Location	Sample Date	Analysis Date	Surrogate Recovery ¹	Total PCBs ²
BM- 90	White Wall Paint	Concrete Block	Class-24	4/26/2011	5/4/2011	100/150	1.14
BM- 91	Light Gray Bottom Layer Floor Paint	Concrete	Girls-02	4/26/2011	5/4/2011	100/125	6.71
BM- 92	Medium Green Wall Paint	Concrete Block	Class-15	4/26/2011	5/4/2011	100/100	7.54
BM- 93	Black Tile Mastic	Concrete	Class-16	4/26/2011	5/4/2011	100/125	0.70
BM- 94	Medium Gray Floor Paint	Concrete	Gym-04	5/11/2011	5/15/11	103/73.6	6.61
BM- 95	Medium Gray Floor Paint	Concrete	Gym-03	5/11/2011	5/15/11	102/83.8	4.79
BM- 96	Light Aqua Green Wall Paint	Plaster	Class-11	5/11/2011	5/17/11	280/250	5.87
BM- 97	Light Blue Wall Paint	Plaster	Class-11	5/11/2011	5/15/11	90.6/99.6	4.66
BM- 98	Light Green Wall Paint	Plaster	Class10	5/11/2011	5/15/11	109/97	4.94
BM- 99	Light Blue Wall Paint	Plaster	Class-09	5/11/2011	5/15/11	89/77	6.04
BM- 100	Light Green Wall Paint	Metal	Class-23	5/11/2011	5/16/11	64.5/57.5	4.70
BM- 101	Light Green Wall Paint	Brick	Class-24	5/11/2011	5/16/11	115/79.5	3.65

Notes:

- 1 Data is presented as a recovery percentage of an added concentration of decachlorobiphenyl. Results are reported for column 1 and column 2 (χ/γ) .
- 2 Total PCBs are reported in mg/kg as an aggregate of Aroclor 1254, 1260, and 1262. No additional Aroclor compounds were detected.
- 3 Data not available due to dilution required for high analyte concentration and/or matrix interference.
- 4 Surrogate recovery data which falls outside the acceptable range is indicated by *italic magenta* text.
- 5 Total PCB concentrations in excess of 25 mg/kg are indicated by **bold orange text.**
- 6 Total PCB concentrations in excess of 50 mg/kg are indicated by **bold italic red text**.

2.5 QA/QC RESULTS

Laboratory analytical results for the blind collocated field duplicate samples and their corresponding Site Characterization samples are summarized below in **Table 2**. A copy of the Site Characterization laboratory data, laboratory QA/QC, methods, and chain of custody forms are presented in **Appendix E**.



Table 2 – QA/QC Results Summary				
Sample ID	Total PCBs ¹	Surrogate Recovery ²	Sample Date	Analysis Date
Duplicate-01	3.693	115/82	4/12/2011	4/22/2011
BM-35	2.920	82/68	4/12/2011	4/20/2011
Duplicate-02 BM-51	18.24 15.32	98/108 103/121	4/12/2011 4/12/2011	4/22/2011 4/22/2011
BHU	10.32	103/121	1/12/2011	1/22/2011
Duplicate-03	10.30	147/138	4/12/2011	4/22/2011
BM-69	10.80	145/102	4/12/2011	4/22/2011
Duplicate 04	41.104	50/50	4/26/2011	5/6/11
BM-82	6.240^4	225/200	4/26/2011	5/6/11
Duplicate-04 (Re-Analysis)	9.440	485/295	4/26/2011	5/10/11
BM-82 (Re-Analysis)	9.040	280/280	4/26/2011	5/10/11
Duplicate-05	2454	Diluted ³	4/26/2011	
BM-86	39.30 ⁴	100/100	4/26/2011	5/2/11
Duplicate-05 (Re-Analysis)	1794	Diluted ³	4/26/2011	5/10/11
BM-86 (Re-Analysis)	61.9 ⁴	200/400	4/26/2011	5/10/11

Notes: 1. Total PCBs are reported in mg/kg as an aggregate of Aroclor 1254 and 1260. No additional Aroclor compounds were detected.

^{2.} Data is presented as a recovery percentage of an added concentration of decachlorobiphenyl. Results are reported for column 1 and column 2 (χ / γ).

^{3.} Surrogate recovery could not be accurately quantified due to interference from coeluting organic compounds present in the sample matrix.

^{4.} In cases for which co-located duplicate results did not correspond to the initial sample results either the material was presumptively considered to be PCB Bulk Product Waste or additional sampling was conducted to confirm results.

3. DISCUSSION

Based on the laboratory analytical results of bulk product and bulk material samples collected as part of Credere's Site Characterization, certain paint located within the subject property building is defined as a PCB Bulk Product Waste. In addition, select bulk materials which are covered with PCB Bulk Product Waste paint have been impacted by PCB concentrations present therein. The location of samples collected for the purpose of Site Characterization and the associated PCB concentrations are depicted on **Figures 2** though **4**.

3.1 AREA DESCRIPTIONS AND CONCLUSIONS

Photographs depicting subject property conditions can be referenced in **Appendix A**. In general, the following conclusions can be made based on observed conditions and Site Characterization data:

Basement

Based on previous experience, below-grade areas which would be subject to moisture and temperature fluctuations as well as those areas located in close proximity to the physical plant of a building have a higher potential to contain PCB Bulk Product Waste. As such, Credere focused a high concentration of Site Characterization sample locations in the basement.

The basement of the subject property building is generally characterized by painted concrete floors, painted brick walls, and painted plaster ceilings or drop acoustical tile ceilings with bare wood above. Potential PCB Bulk Product Waste samples were obtained from select floors, walls, and ceilings of the basement. Detectible PCB concentrations were relatively consistent across the sampled media, ranging from below the method detection limit to 12.50 mg/kg. Based on these conditions, no PCB Bulk Product Waste was identified in the basement of the subject property building.

Conditions and results described above can be referenced on **Figure 2**.

<u>First Floor - Central Section</u>

The 1923 vintage central section of the first floor of Site building is characterized by wooden floors with carpet, painted plaster walls, and drop acoustical tile ceilings with painted plaster ceilings above. Representative potential PCB Bulk Product Waste samples were obtained from the walls of the central section of the first floor. Consistent with observed conditions, no indication of potential dilution (i.e. multiple paint layers) was noted in the majority of the rooms and detectible PCB concentrations were relatively constant across the sampled media, ranging from 4.140 mg/kg to 9.982 mg/kg. However, analytical variability was identified in the paint sample collected from Class-11 through duplicate sampling. Further investigation of this room identified an older light aqua green base paint layer which was hidden beneath a newer white paint layer. As a result, Credere collected two additional paint samples from Class-11 which characterized the two potential different paint types. Based on these additional results, paint



within Class-11 contained PCB concentrations ranging from 4.655 mg/kg to 9.440 mg/kg. Regardless, based on the analytical variability identified through the duplicate sampling of this paint, Credere conservatively considered paint within Class-11 to represent PCB Bulk Product Waste.

Aside from the material described above, no additional suspect light aqua green paint and no PCB Bulk Product Waste were identified in the central section of the first floor of the Site building. Conditions and results described above can be referenced on **Figure 3**.

First Floor - North Wing

The 1959 north wing addition to the subject property building contains painted concrete block walls, poured concrete floors with vinyl tile above, and unpainted mineral fiber tile ceilings. Exceptions to the above include Hallway-01, the Shop (Class-03, Shop-01, and Shop-02), and Boys-01. The south side of Hallway-01 contains matte yellow and white painted brick along the section of the wall that is shared with the central portion of the subject property building. The Shop contains medium gray painted concrete floors and a bare metal ceiling, and the concrete floors in Boys-01 are covered with dark green paint over light gray paint.

Samples obtained from the painted concrete block walls in the classrooms, bathroom, and Hallway-01 (north side) in this area contained PCB concentrations ranging from below the method detection limit to 18.30 mg/kg. No PCB Bulk Product Waste was identified in these areas of the subject property building.

Alternatively, both the medium gray paint on the floors, as well as the white paint on the concrete block walls in the Shop (Class-03, Shop-01, and Shop-02), were characterized as PCB Bulk Product Waste. Based on the use of this area as a workshop which contained a kiln, the use of PCB-containing paint is logical. Consistent with the concentrations of PCBs identified in the wall paint in this area and previous experience with similar scenarios, it is unlikely that the concrete block located below the wall paint meets the definition of PCB Remediation Waste; however this conclusion will be confirmed through verification sampling after remediation is complete.

In rooms Class-03, Shop-01, and Shop-02, gray floor paint PCBs concentrations ranged from 726 to 1,420 mg/kg, meeting the definition of PCB Bulk Product Waste. The concrete floor in Class-03 was also analyzed to contain PCBs at a concentration of 6.780 mg/kg. Therefore, concrete floor material in these three areas has been characterized as PCB Remediation Waste.

In addition, certain paint located along the south side of Hallway-01, which included both brick and concrete walls, contained concentrations of PCBs that were either slightly above 50 mg/kg (52.30 mg/kg) or were relatively close to this level, ranging from 8.279 to 46.00 mg/kg. The higher concentrations were detected along the brick sections of wall with the concrete block sections displaying lower PCB levels. In accordance with the criteria presented in **Section 3.2.3**, paint located along the entire south side of Hallway-01 has been conservatively characterized as



a PCB Bulk Product Waste. Based on the concentrations of PCBs identified in the wall paint and previous experience with similar scenarios, it is unlikely that the brick located below this paint meets the definition of PCB Remediation Waste; however this conclusion will be confirmed through verification sampling.

Conditions and results described above can be referenced on **Figure 3**.

First Floor - South Wing

This section of the subject property building was constructed in 1961 and is characterized by painted concrete block walls, poured concrete floors with vinyl tile above, and unpainted mineral fiber tile ceilings. Exceptions to the above include Hallway-02, which contains painted brick along the wall which is shared with the central portion of the subject property building, and the Gym (Gym-01) which was constructed with a painted metal ceiling. In addition, support rooms Gym-02 through Gym-04 contain light gray painted concrete floors and the floors in Gym-05 consist of medium gray painted concrete. Finally, bathrooms Boys-02 and Girls-01 contain dark green or light gray top coats with a medium gray base layer of paint over concrete.

Paint samples obtained from the concrete block walls and plaster and metal ceilings in the gym, classrooms, bathrooms, supports rooms, and hallway in this area contained PCB concentrations ranging from below the method detection limit to 6.977 mg/kg. With the exception of the bathrooms and Gym-05, PCB concentrations identified in floor paint in this portion of the subject property ranged from 0.540 to 6.610 mg/kg. Therefore, no PCB Bulk Product Waste was identified in these areas of the subject property building.

The medium gray base layer of paint on the floor in Boys-02 contained PCBs at a concentration of 1,430 mg/kg. Though no sample was collected, the base layer of paint in Girls-01 was consistent and is assumed to contain similar PCB concentrations. In addition, concrete collected from the floor of Boys-02 indicated that the floor within this room represents PCB Remediation Waste with a PCB concentration of 12.90 mg/kg. Likewise, it is assumed that the concrete floor of Girls-01 is subject to the same characterization. It is unclear why PCB-containing paint was used in these bathrooms, however the concentrations and paint type were similar to the material used in the Shop area and these floors may have been covered with surplus material.

The medium gray paint located along the floor of support room Gym-05 contained PCB concentrations that ranged from 31.70 mg/kg to 61.90 mg/kg. A question of potential sample heterogeneity was identified in a co-located duplicate sample collected from this area which contained PCBs at a concentration of 179.0 mg/kg. Consistent with the above and based on the criteria presented in **Section 3.2.3**, paint located along the floor of Gym-05 has been characterized as a PCB Bulk Product Waste. In addition, though no concrete samples were analyzed in this area, the concrete floor will be relatively easy to remove for disposal so this material has been defined as PCB Remediation Waste. Credere is uncertain as to why PCB-containing paint was used in this area though electrical switchgear (non oil-filled) is located in this room.



Conditions and results described above can be referenced on **Figure 3**.

Second Floor - Central Section

The central section of the second floor of the subject property building is characterized by wooden floors with carpet, painted plaster walls, and drop acoustical tile ceilings with painted plaster ceilings above. The materials used in this area of the subject property building were consistent with those used in the central section of the first floor; however no light aqua green paint was identified in any area of the central section of the second floor. A representative wall paint sample obtained from this area of the subject property building contained PCBs at a concentration of 7.520 mg/kg. Consistent with observed conditions, no indication of potential dilution (i.e. multiple paint layers) was noted. No additional suspect light aqua green paint and no PCB Bulk Product Waste were identified in the central section of the second floor of Site building.

Conditions and results described above can be referenced on **Figure 4**.

Second Floor - North and South Wings

The second floor additions to the subject property building are of very similar construction as their first floor counterparts and contain painted concrete block walls, poured concrete floors with vinyl tile above, and unpainted mineral fiber tile ceilings. Exceptions to the above include limited sections of Hallways-05 and 06, which contain painted brick along the wall which is shared with the central portion of the subject property building, and the concrete floor of Girls-02, which is covered with dark green paint over light gray paint.

Samples obtained from the painted concrete block walls in the classrooms in this area, the brick walls of Hallways-05 and 06, and the base layer of paint from Girls-02 contained PCB concentrations ranging from 1.140 mg/kg to 13.56 mg/kg. In addition, PCB concentrations in tile mastic collected from Class-15 in this area were limited to 0.698 mg/kg. As such, and consistent with the qualifications described in **Section 3.2.3**, materials in the second floor north and south wings were not identified as PCB Bulk Product Waste.

Conditions and results described above can be referenced on **Figure 4**.

Basement through Second Floor - North and South Stairs

Stairwells in the subject property building contained very consistent construction materials. These included metal stairs which were painted with dark green paint, and yellow and white painted brick walls. Paint samples collected from these materials contained PCB concentrations which ranged from 5.330 mg/kg to 14.37 mg/kg. Consistent with these results and in accordance with the conditions described in **Section 3.2.3**, no PCB Bulk Product Waste was identified in the stairwells of the subject property building.



Conditions and results described above can be referenced on **Figures 2** through **4**.

3.2 EXTENT OF CONTAMINATION

3.2.1 PCB Bulk Product Waste

As determined by the results of the completed Site Characterization, PCB Bulk Product Waste paints were identified along certain floor and wall surfaces in the two new wings of the subject property building (i.e. the 1959 and 1961 additions). In addition, based on uncertainty identified in initial and QA/QC samples, certain wall paint in the central 1923 section of the subject property building is considered to represent PCB Bulk Product Waste.

Specifically these paints include:

- <u>Medium gray floor paint:</u> Identified in the Shop (Shop-01, Shop-02 and Class-03), the base layer of paint in Boys-02 and Girls-01, and in Gym-05.
- White wall paint over concrete block in the Shop: Identified only in the Shop (Shop-01, Shop-02 and Class-03).
- <u>Matte yellow and white wall paint:</u> Identified only in certain areas of the south side of Hallway-01. Numerous glossy yellow and white wall paint samples were collected from other areas of the subject property and did not exhibit the characteristics of PCB Bulk Product Waste.

No PCB Bulk Product Waste was identified in the collected ceiling paint samples. In addition, no samples collected from other bulk products (i.e. caulking, glazing, and mastic) indicated the presence of PCB Bulk Product Waste.

3.2.2 Impacted Bulk Materials (PCB Remediation Waste)

For the purposes of this report, materials which contain greater than 1 mg/kg as a result of contact or other impact by PCB Bulk Product Waste are considered to represent PCB Remediation Waste. Based on the results of the completed Site Characterization activities, PCB Remediation Waste was identified or is assumed to be present in concrete flooring materials located directly below surfaces which are coated with PCB Bulk Product Waste. Consistent with the concentrations of PCBs identified in PCB Bulk Product Waste wall paint and based on previous experience with other similar sites, it is unlikely that the brick and/or concrete block located below this material meets the definition of PCB Remediation Waste; however this conclusion will be confirmed through verification sampling after remediation is complete. In addition, certain suspect paint which has been considered to represent PCB Bulk Product Waste was applied to plaster wall materials. For the purposes of this project, it is assumed that this plaster has been impacted by concentrations of PCBs in excess of 1 mg/kg.



3.2.3 Excluded PCB Products

Certain materials included within Credere's Site Characterization contained concentrations of PCBs which were greater than 1 mg/kg and less than 50 mg/kg. However, to ensure that PCB concentrations analyzed in these materials were not diluted due to a mixed sample matrix, certain conditions were considered before it was determined that the Excluded PCB Product definition applied. Specifically, to be considered an Excluded PCB Product, no indication of multiple paint layers, uncertain paint history, or potential mixing of substrate with sample matrix were allowed. In addition, to further reduce uncertainty, and as a conservative measure due to the intended future use of the subject property for residential purposes, the action level used when designating a material as an Excluded PCB Product was reduced to 25 mg/kg.

Following the application of these conditions, certain floor, wall, and ceiling paint, as well as other bulk products such as caulking, glazing, and mastic located at the subject property meet the definition of an Excluded PCB Product. These materials are not included within the Site and are not scheduled for disposal. However, it should be noted that, with very rare exception, all identified Excluded PCB Products are scheduled for removal and replacement, or covering with permanent new materials (i.e. new steel stud and sheetrock wall systems) as part of the redevelopment of the subject property building. Though not regulated for disposal under the requirements of 40 CFR 761, if removed, these materials will be disposed of in accordance with State requirements.

3.3 DATA EVALUATION

Following the receipt of analytical results, Credere conducted a data validation review to ensure that all laboratory data is of defensible analytical quality. Procedures employed were consistent with EPA Region I Data Validation Functional Guidelines for Evaluating Environmental Analyses.

A review of QA/QC documentation and analytical narratives provided by Spectrum identified seven samples with decachlorobiphenyl surrogate recovery percentages outside of the recommended method range. According to Spectrum, this condition was due to interference from coeluting organic compounds present in the sample matrix and sample results were accepted based on remaining QA/QC data. In addition, the decachlorobiphenyl surrogate recovery data was diluted below quantification limits and/or was unquantifiable due to matrix interferences in five samples. The results were accepted based on the remaining QA/QC data. In ten of the twelve samples which exhibited the QA/QC concerns identified above, the materials of concern consisted of either PCB Bulk Product Waste or PCB Remediation Waste and are scheduled for disposal.

In the other two cases in which samples exhibited the QA/QC concerns identified above, the materials were not identified as PCB Bulk Product Waste or PCB Remediation Waste. These were samples BM-9 (Black wall paint in Class-09) and BM-18 (dark gray door caulk in Shop-02). Concentrations of PCBs in these samples ranged from below the method detection limit to



4.14 mg/kg, therefore, based on this range of concentrations and other laboratory-identified QAQC, Credere identified no evidence of false negative results in these samples.

Credere's review of laboratory data for blind collocated field duplicate samples documented no significant disparity in the analytical results or identified Aroclor compounds. Though there was variability between certain original and collocated duplicate samples, the results do not indicate a lack of accuracy in the concentration ranges of the selected action levels, i.e. QA/QC samples collected from material that was below the selected action levels matched the original samples from that concentration range and vice versa. In cases for which QA/QC results did not correspond to the initial sample results (BM-82/Dup-04 and BM-86/Dup-05), either the material was presumptively considered to be PCB Bulk Product Waste or additional sampling was conducted to confirm results. Based on these circumstances, it is the opinion of Credere that QA/QC analytical results do not represent a fault in the analytical method or further fault in the sampling technique and all data is usable without adjustment.



4. DISPOSAL AND ALTERNATIVE DECONTAMINATION PLAN

Based on the presented laboratory analytical results, and as painted surfaces located at the subject property have not been impacted by a spill of PCBs, certain paints located within the limits of the Site comprise PCB Bulk Product Waste, as defined in 40 CFR 761.3, and are regulated for disposal in accordance with 761.62.

As no cleanup levels for bulk materials impacted by concentrations of PCBs contained within a PCB Bulk Product Waste are presented in 40 CFR 761, these materials are proposed to be addressed in accordance with an alternative decontamination approval which is hereby requested pursuant to 40 CFR 761.79(h). Specifically, Credere proposes to consider these bulk materials PCB Remediation Waste, dispose of them in accordance with 40 CFR 761.61(a)(5), and utilize the less than or equal to 1 mg/kg action level presented at 40 CFR 761.61(a)(4)(i)(A).

The details of Credere's cleanup plan and alternative decontamination request are presented below. The specific areas selected from cleanup are depicted on **Figure 5** and summarized below in **Table 3**.



	Table 3 -	- Summary of Cle	eanup Areas	
Area	Wall Paint Remediation Technique	Wall Paint Remediation Quantity	Floor Remediation Technique	Floor Remediation Quantity
Class-03	Abrasive blasting of concrete block walls	1,287 Square Feet	Complete removal of painted concrete, removal of 2 inches of underlying soil.	30 Cubic Yards
Shop-01	Abrasive blasting of concrete block walls	429 Square Feet	Complete removal of painted concrete, removal of 2 inches of underlying soil.	7 Cubic Yards
Shop-02	Abrasive blasting of concrete block walls	351 Square Feet	Complete removal of painted concrete, removal of 2 inches of underlying soil.	5 Cubic Yards
Hallway-01	Abrasive blasting of concrete block and brick wall (south side only)	670 Square Feet	None	None
Class-11	Presumptive complete removal of painted plaster wall covering system, structural materials to remain.	1,200 Square Feet	None	None
Girls-01	None	None	Complete removal of painted concrete, removal of 2 inches of underlying soil.	5 Cubic Yards
Boys-02	None	None	Complete removal of painted concrete, removal of 2 inches of underlying soil.	5 Cubic Yards
Gym-05	None	None	Complete removal of painted concrete, removal of 2 inches of underlying soil.	6 Cubic Yards
TOTAL		3,937 Square Feet		58 Cubic Yards

The above cleanup areas and methods are depicted on **Figure 5**.

4.1 CONTAINMENT MEASURES

The removal and disposal of PCB Bulk Product Waste and impacted bulk materials at the Site will be performed within fixed polyethylene containment systems and under a negative atmosphere environment which will be established using high volume air handlers equipped with HEPA filtration systems. In addition, supplied air will be provided to abatement personnel during the removal of PCB Bulk Product Waste to ensure worker safety and maintain a complete seal around each removal area. The efficacy of these containment measures will be monitored by a qualified industrial hygienist and air and/or dust sampling will be conducted both during and following the completion of removal efforts. These measures will minimize the potential for



dust, abrasive media, and any other waste to impact areas outside of the removal and decontamination areas.

4.2 PERFORMANCE-BASED DISPOSAL OF PCB BULK PRODUCT WASTE

In accordance with 40 CFR 761.62(a)(2), Credere will direct the removal and proper off property disposal of identified PCB Bulk Product Waste. With oversight provided by Credere, a qualified environmental services provider will remove the identified PCB Bulk Product Waste paint, which has been applied to brick and concrete block walls, using abrasive blasting. Blast media will not be recirculated to ensure that waste materials are not introduced back into the remediated surface. When PCB Bulk Product Waste paint is applied to surfaces or structures which are easily removed in their entirety for disposal, such as with poured slab concrete floors or plaster wall covering systems, these materials will be completely removed instead of remediated (See Section 4.3 below). The areas of the Site which will be addressed through the performance-based disposal of PCB Bulk Product Waste are depicted on Figure 5.

Removed PCB Bulk Product Waste and the associated cleanup waste (i.e. blast media and plaster) will first be contained within polyethylene bags and then collected and contained within properly sealed and labeled D.O.T.-approved containers. Containerization and transport equipment used during remediation will be dedicated for use inside the Site or for outside the removal area. The transfer of waste will occur between this equipment within a contaminant reduction zone to minimize the migration of remediation waste through tracking. Remediation waste will ultimately be transported under Uniform Hazardous Waste Manifest for disposal at a hazardous waste landfill approved under 40 CFR 761.75.

Following the removal of waste media, the surfaces which remain within the removal area will be fine cleaned using high capacity vacuums equipped with HEPA filtration systems. It should be noted that the remediated concrete block walls in the Shop which will remain following PCB Bulk Product Waste removal will be enclosed by a new steel stud and sheetrock wall system. The structural materials which will remain after wall plaster removal will be similarly enclosed by new sheetrock walls. The concrete block and brick walls in Hallway-01 will be restored using new materials to emulate the original brick finish and will be primed and repainted.

Equipment utilized during performance-based disposal activities will be decontaminated in accordance with 40 CFR 761 Subpart S. Disposable equipment will be placed into properly labeled D.O.T.-approved containers for subsequent off property transport under Uniform Hazardous Waste Manifest for disposal at a hazardous waste landfill approved under 40 CFR 761.75.

4.3 ALTERNATIVE DECONTAMINATION OF BULK MATERIALS

Credere proposes the off property disposal of bulk materials with PCB concentrations greater than or equal to 1 mg/kg, or those materials which are assumed to contain these concentrations, at a hazardous waste landfill approved under 40 CFR 761.75.



Concrete floor materials will be removed using pneumatic hammers. Following concrete removal, approximately 2 inches of the exposed soil surface will also be removed to ensure that no PCB Remediation Waste remains. Plaster wall materials and the metal mesh to which it is applied will be removed manually to minimize the degradation of the waste material.

The above remediation waste materials will be collected and contained first within polyethylene bags and then within properly sealed and labeled D.O.T.-approved containers for off property transport under Uniform Hazardous Waste Manifest. Containerization and transport equipment used during remediation will be dedicated for use inside the Site or for outside the removal area. The transfer of waste will occur between this equipment within a contaminant reduction zone to minimize the migration of remediation waste through tracking.

Following the removal of waste media, the surfaces which remain within the removal area will be fine cleaned using high capacity vacuums equipped with HEPA filtration systems.

Remediation waste will be transported off property under Uniform Hazardous Waste Manifest for disposal at a hazardous waste landfill approved under 40 CFR 761.75.

Equipment utilized during alternative decontamination activities will be decontaminated in accordance with 40 CFR 761 Subpart S. Disposable equipment will be placed into properly labeled D.O.T.-approved containers for subsequent off property transport under Uniform Hazardous Waste Manifest for disposal at a hazardous waste landfill approved under 40 CFR 761.75.

4.4 POST-DISPOSAL AND ALTERNATIVE DECONTAMINATION VERIFICATION

At the completion of removal activities associated with the performance-based disposal of identified PCB Bulk Product Waste from concrete block, brick, and plaster wall surfaces, Credere personnel will conduct a visual assessment of the remediated walls to ensure that PCB Bulk Product Waste has been removed from the Site for proper disposal. Following acceptable visual results, verification samples will be collected from the remediated surfaces (i.e. brick or concrete block walls, or wooden studs) within the limits of the Site to ensure that no concentrations of PCBs in excess of 1 mg/kg remain in these bulk materials. Verification samples will be collected in accordance with the EPA Region I *Draft Standard Operating Procedure for Sampling Concrete in the Field.* Credere personnel will collect the bulk material samples using an impact hammer drill, dedicated 0.5-inch masonry drill bits, and dedicated scoopulas to obtain a minimum of 10 grams of material from the sampling surface to 0.5-inches below grade. The bulk material verification samples will be submitted to Spectrum for analysis of PCBs by EPA Method 8082 using manual Soxhlet extraction Method 3540.

Similarly, in order to ensure that media remaining following the removal and off property disposal of PCB-impacted concrete flooring have not been impacted as a result of the proposed removal efforts, confirmatory soil samples will be collected by Credere using appropriate EPA



protocol. These soil samples will be submitted to Spectrum for laboratory analysis of PCBs by EPA Method 8082 using manual Soxhlet extraction Method 3540.

Verification sample locations will be selected in general accordance with 40 CFR 761 Subpart O and a risk-based cleanup approval issued in accordance with 40 CFR 761.61(c). Credere will overlay a square grid system throughout each area selected for PCB Bulk Product Waste and PCB-impacted bulk material removal. Discrete samples will be collected from these grid points with a frequency of one sample for every 150 square feet of remaining media, or a minimum of three samples from each media (i.e. brick or concrete block wall, wooden studs, or soil) within each removal area, whichever is greater. A total of approximately 54 verification samples will be collected from the Site as depicted on **Figure 6**. QA/QC and data validation techniques employed during verification sampling activities will be consistent with those utilized for the previously completed Site Characterization.

4.5 CLEAN-UP STANDARDS

Following the completion of the proposed performance-based disposal activities, no visible PCB Bulk Product Waste identified during the Site Characterization will remain at the Site. In addition, porous surfaces from which the identified PCB Bulk Product Waste has been removed, and soil located below any removed impacted bulk material, will contain no concentrations of PCBs in excess of 1 mg/kg. As such, future usage of the Site will not be restricted.

4.6 RESTORATION

Upon completion of PCB Bulk Product Waste removal, and consistent with the redevelopment plans for the subject property, the remediated porous wall surfaces or structural wall components will be coated with fresh finish materials and paint, or enclosed within new permanent steel stud and sheetrock wall systems. In addition, areas of PCB-impacted concrete flooring removal will be restored through backfilling with gravel, the installation of a vapor barrier, and the pouring of a new concrete floor.

4.7 REMEDIATION WASTE DISPOSAL

PCB Bulk Product Waste and impacted bulk materials removed from the Site will be collected and contained within properly sealed and labeled D.O.T.-approved containers. These materials will then be transported off property under Uniform Hazardous Waste Manifest for disposal at a hazardous waste landfill approved under 40 CFR 761.75.

Non-disposable equipment utilized at the Site will be decontaminated in accordance with 40 CFR 761 Subpart S. Dust, residuals, disposable equipment, containment controls, and other cleanup wastes will be placed into properly labeled D.O.T.-approved containers for subsequent off property transport and disposal at a hazardous waste landfill approved under 40 CFR 761.75.



4.8 CONTINGENT REMOVAL ACTIVITIES

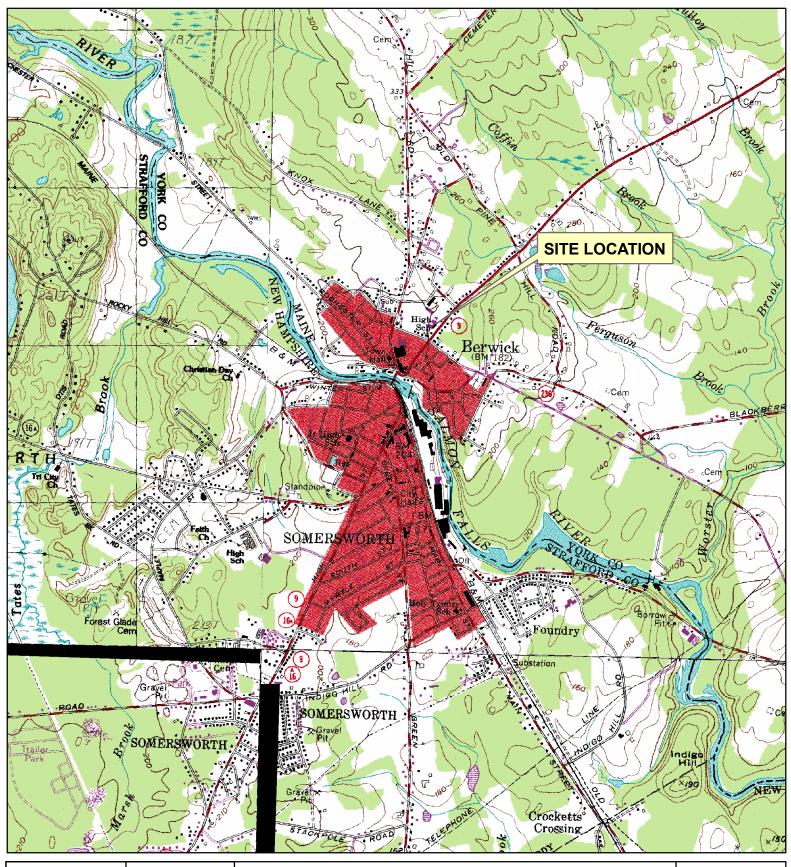
Upon completion of PCB Bulk Product Waste removal, Credere will conduct a visual inspection to ensure that all paint and cleanup waste has been removed from the underlying porous surfaces. If Credere notes residual paint or other material, additional cleanup efforts will be conducted. Similarly, if concentrations of PCBs equal to or in excess of 1 mg/kg are identified in post-removal verification samples, additional removal of PCB-impacted bulk materials will be conducted. If required, the cleanup technique will include the complete removal of the impacted bulk material. Following any contingent removal activity, completion and cleanup levels will be re-verified in accordance with **Section 4.4.**

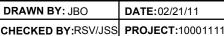


5. LIMITATIONS

Should additional information become available concerning this property or neighboring properties in the future, that information should be made available to Credere for review so that the conclusions presented in this report may be modified as necessary. With specific regard to sampling activities, data obtained from representative discrete sampling points may not be wholly representative of the nature and extent of conditions at locations other than the actual sample locations on the date the samples were obtained. Variable conditions may only become evident upon further sampling, analysis, or exploration. If variations become apparent in the future, it may be necessary to reevaluate the conclusions and recommendations offered in this report.









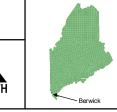
Credere Associates, LLC

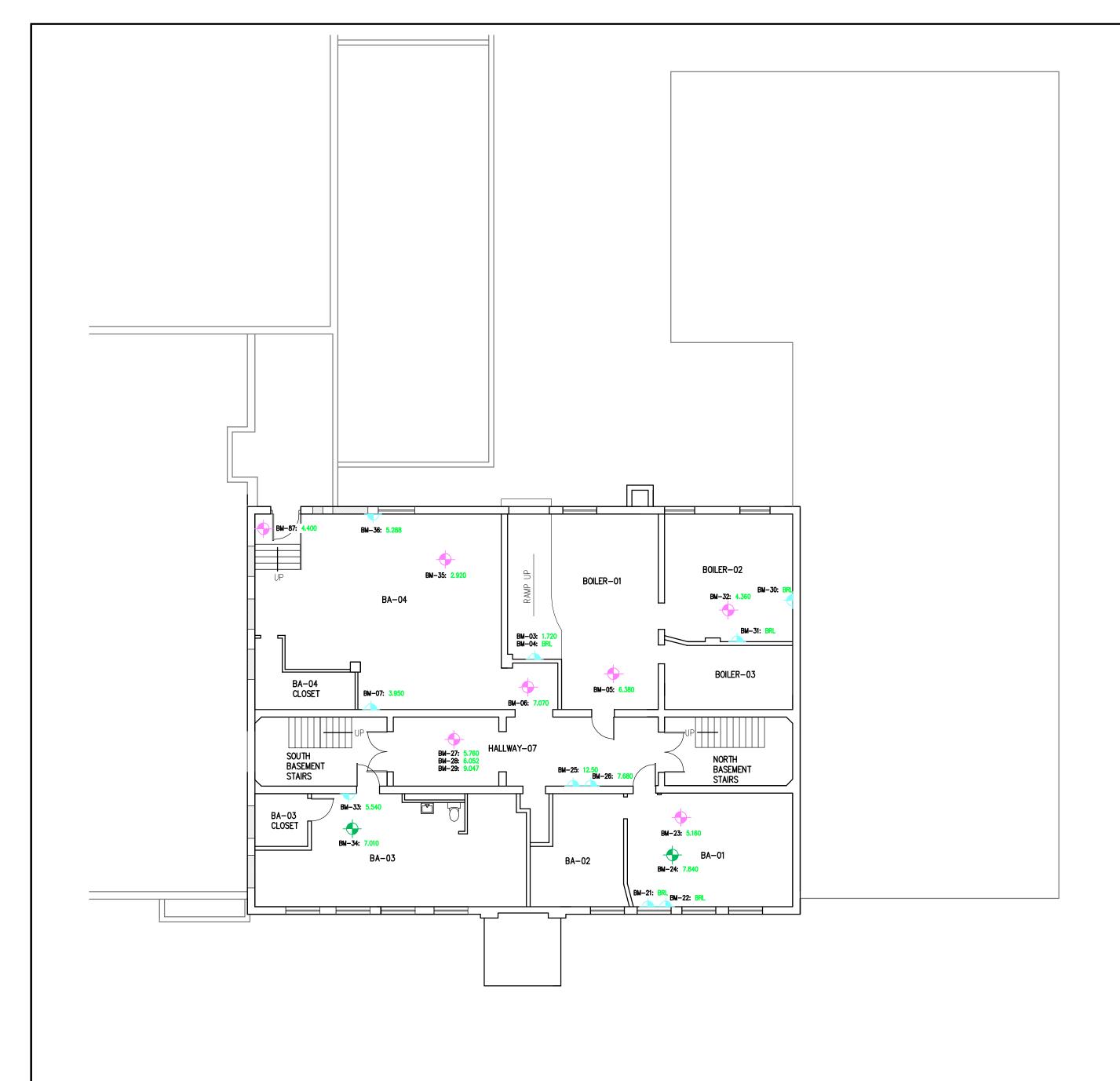
776 Main Street Westbrook, Maine Tel. (207) 828-1272 Fax (207) 887-1051

Figure 1 Site Location Map

Former Sullivan School 45 School Street Berwick, Maine

0 1,000 2,000 Feet





LEGEND

→ BM−X

SM-X SAMPLE COLLECTED FROM FLOOR

→ BM−X SAMPLE COLLECTED FROM CEILING

BM-X SAMPLE COLLECTED FROM WALL

BM−X

BM-X CAULKING/GLAZING SAMPLE

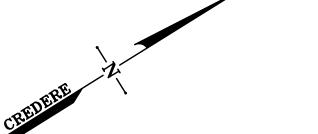
RL BELOW REPORTING LIMIT

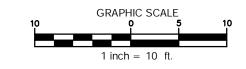
NOTES:

1. CONCENTRATIONS PRESENTED AS TOTAL PCBs IN mg/kg

- 2. PCB RESULTS FOR BULK PRODUCT SAMPLES <25 mg/kg ARE DENOTED BY GREEN TEXT
- 3. PCB RESULTS FOR BULK PRODUCT SAMPLES >25 BUT <50 mg/kg ARE DENOTED BY ORANGE TEXT
- 4. PCB RESULTS FOR BULK PRODUCT SAMPLES >50 mg/kg ARE DENOTED BY RED TEXT

ROOM ID	ROOM DESCRIPTION
BA-01	DARK GREEN PAINTED CONCRETE FLOOR
	LIGHT BLUE BRICK WALLS WITH OLDER WHITE BELOW (SAMPLED SEPARATELY)
	WHITE PAINTED PLASTER CEILING
BA-02	BARE CONCRETE FLOOR
	BARE (PARTIAL VERY THIN WHITEWASH) BRICK WALLS
	WHITE PAINTED PLASTER CEILING
BA-03	DARK GREEN PAINTED CONCRETE FLOOR
	LIGHT BLUE BRICK WALLS WITH OLDER YELLOW BELOW (SAMPLED YELLOW)
	WHITE PAINTED PLASTER CEILING
BA-03 CLOSET	BARE CONCRETE FLOOR
	BARE (PARTIAL VERY THIN WHITEWASH) BRICK WALLS
	WHITE PAINTED PLASTER CEILING
BA-04	LIGHT GREY PAINTED CONCRETE FLOOR
	DARK BLUE AND WHITE PAINTED BRICK WALLS
	DROP CEILING WITH BARE PLASTER ABOVE
BA-04 CLOSET	BARECONCRETE FLOOR
	BARE (PARTIAL VERY THIN WHITEWASH) BRICK WALLS
	BARE PLASTER CEILING
BOILER-01	DARK GREEN PAINTED CONCRETE FLOOR
	DARK GREY AND WHITE PAINTED BRICK WALLS
	WHITE PAINTED PLASTER CEILING
BOILER-02	DARK GREEN PAINTED CONCRETE FLOOR
	LIGHT BLUE AND WHITE PAINTED BRICK WALLS
	DROP CEILING WITH WOOD ABOVE
BOILER-03	BARE CONCRETE FLOOR
	BARE BRICK WALLS
	WHITE PAINTED PLASTER CEILING
HALLWAY-07	FLOOR IS DARK GREEN OVER LIGHT GREY OVER DARK GREEN (SAMPLED SEPARATELY)
	YELLOW AND WHITE PAINTED BRICK WALLS
	PLASTER CEILING
NORTH BASEMENT STAIRS	DARK GREEN PAINTED METAL STAIRS
	YELLOW AND WHITE PAINTED BRICK WALLS
SOUTH BASEMENT STAIRS	DARK GREEN PAINTED METAL STAIRS
	YELLOW AND WHITE PAINTED BRICK WALLS





 DRAWN BY:
 JBO
 DATE:
 3/23/11

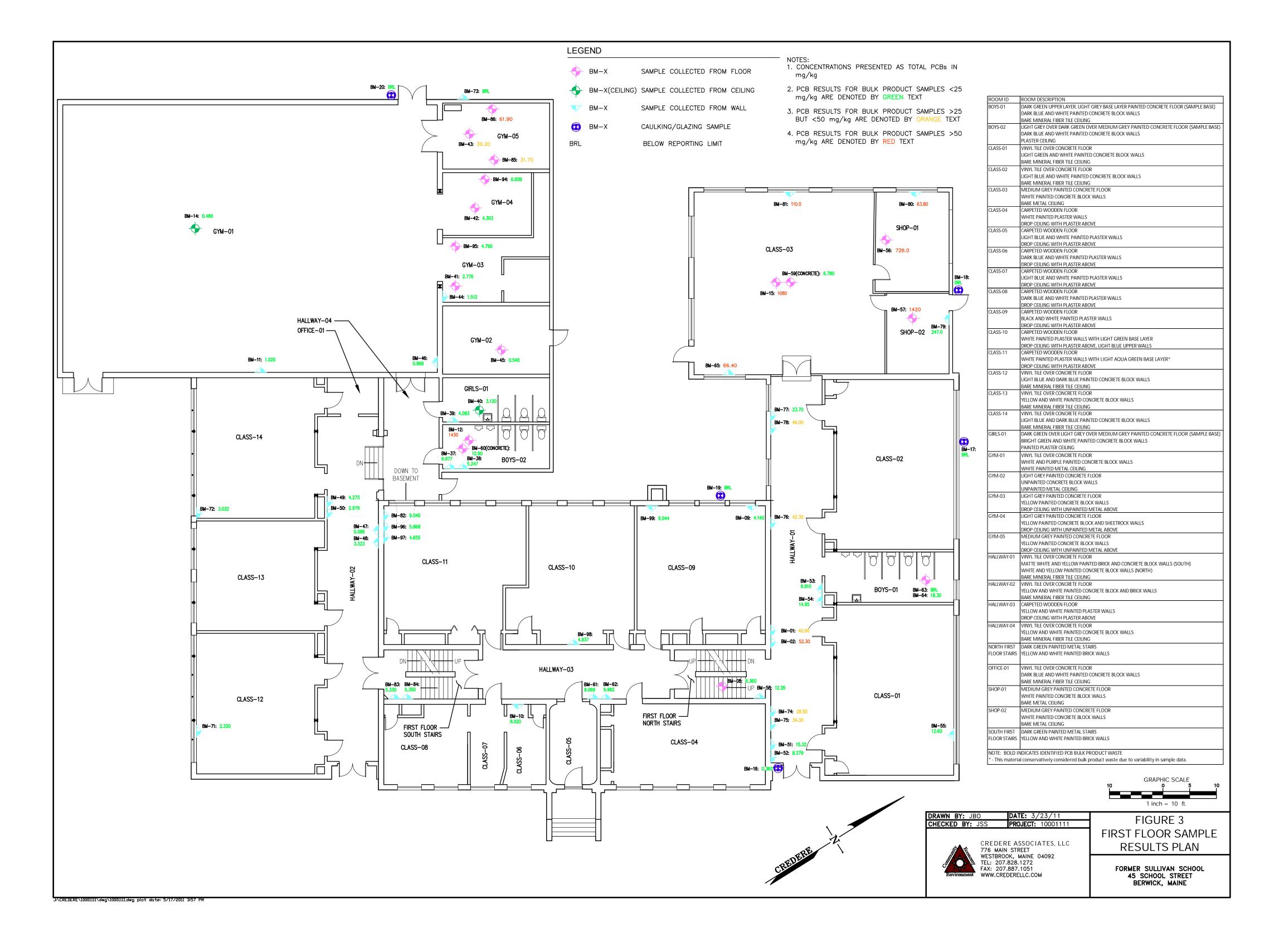
 CHECKED BY:
 JSS
 PROJECT:
 10001111

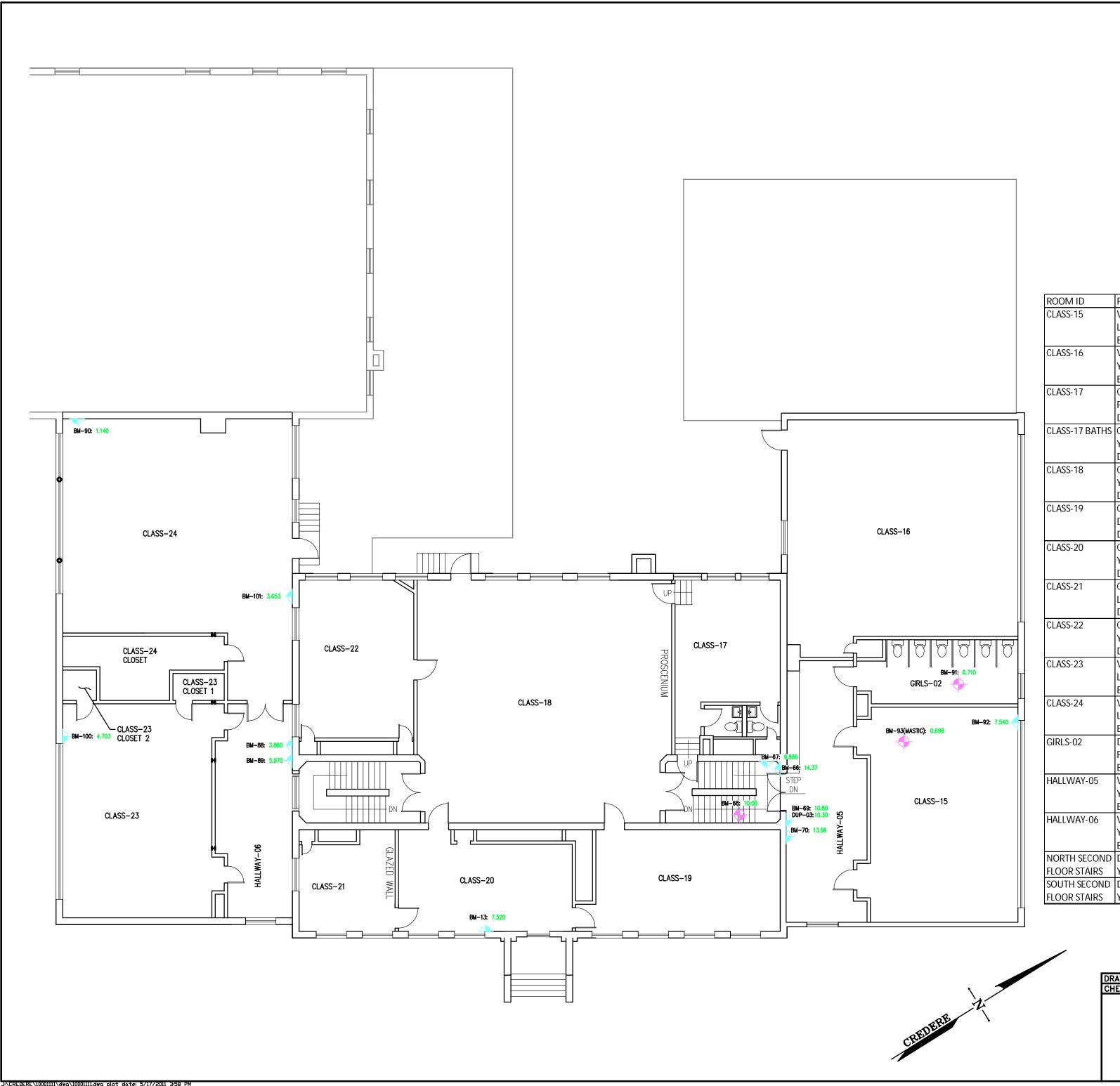


CREDERE ASSOCIATES, LLC
776 MAIN STREET
WESTBROOK, MAINE 04092
TEL: 207.828.1272
FAX: 207.887.1051
WWW.CREDERELLC.COM

FIGURE 2 BASEMENT FLOOR SAMPLE RESULTS PLAN

> FORMER SULLIVAN SCHOOL 45 SCHOOL STREET BERWICK, MAINE





LEGEND

→ BM−X SAMPLE COLLECTED FROM FLOOR

→ BM−X

SAMPLE COLLECTED FROM CEILING

SAMPLE COLLECTED FROM WALL

▼ BM−X

 BM−X CAULKING/GLAZING SAMPLE

BELOW REPORTING LIMIT

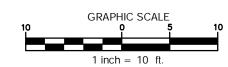
NOTES:

1. CONCENTRATIONS PRESENTED AS TOTAL PCBs IN mg/kg

- 2. PCB RESULTS FOR BULK PRODUCT SAMPLES <25 mg/kg ARE DENOTED BY GREEN TEXT
- 3. PCB RESULTS FOR BULK PRODUCT SAMPLES >25 BUT <50 mg/kg ARE DENOTED BY ORANGE TEXT

4. PCB RESULTS FOR BULK PRODUCT SAMPLES >50 mg/kg ARE DENOTED BY RED TEXT

ROOM ID	ROOM DESCRIPTION
CLASS-15	VINYL TILE OVER CONCRETE FLOOR
	LIGHT GREEN AND WHITE PAINTED CONCRETE BLOCK AND BRICK WALLS
	BARE MINERAL FIBER TILE CEILING
CLASS-16	VINYL TILE OVER CONCRETE FLOOR
	YELLOW AND WHITE PAINTED CONCRETE BLOCK WALLS
	BARE MINERAL FIBER TILE CEILING
CLASS-17	CARPETED WOODEN FLOOR
	PINK AND LAVENDAR PAINTED PLASTER WALLS
	DROP CEILING WITH PLASTER ABOVE
CLASS-17 BATHS	CARPETED WOODEN FLOOR
	YELLOW AND WHITE PAINTED SHEETROCK WALLS
	DROP CEILING WITH PLASTER ABOVE
CLASS-18	CARPETED WOODEN FLOOR
	YELLOW AND WHITE PAINTED PLASTER WALLS
	DROP CEILING WITH PLASTER ABOVE
CLASS-19	CARPETED WOODEN FLOOR
	DARK BLUE AND WHITE PAINTED PLASTER WALLS
	DROP CEILING WITH PLASTER ABOVE
CLASS-20	CARPETED WOODEN FLOOR
	YELLOW AND WHITE PAINTED PLASTER WALLS
	DROP CEILING WITH PLASTER ABOVE
CLASS-21	CARPETED WOODEN FLOOR
	LIGHT GREEN AND WHITE PAINTED PLASTER WALLS
	DROP CEILING WITH PLASTER ABOVE
CLASS-22	CARPETED WOODEN FLOOR
	YELLOW AND WHITE PAINTED PLASTER WALLS
	DROP CEILING WITH PLASTER ABOVE
CLASS-23	VINYL TILE OVER CONCRETE FLOOR
	LIGHT GREEN AND WHITE PAINTED CONCRETE BLOCK WALLS
	BARE MINERAL FIBER TILE CEILING
CLASS-24	VINYL TILE OVER CONCRETE FLOOR
02,100 2 .	LIGHT GREEN AND WHITE PAINTED CONCRETE BLOCK WALLS
	BARE MINERAL FIBER TILE CEILING
GIRLS-02	DARK GREEN OVER LIGHT GREY BASE LAYER PAINTED CONCRETE FLOOR (SAMPLE BAS
020 02	PINK AND WHITE PAINTED CONCRETE BLOCK WALLS
	BARE MINERAL FIBER TILE CEILING
HALLWAY-05	VINYL TILE OVER CONCRETE FLOOR
	YELLOW AND WHITE PAINTED CONCRETE BLOCK AND BRICK WALLS
	BARE MINERAL FIBER TILE CEILING
HALLWAY-06	VINYL TILE OVER CONCRETE FLOOR
	YELLOW AND WHITE PAINTED CONCRETE BLOCK AND BRICK WALLS
	BARE MINERAL FIBER TILE CEILING
NORTH SECOND	DARK GREEN PAINTED METAL STAIRS
FLOOR STAIRS	YELLOW AND WHITE PAINTED BRICK WALLS
	DARK GREEN PAINTED METAL STAIRS
FLOOR STAIRS	YELLOW AND WHITE PAINTED BRICK WALLS
I LOUR STAIKS	ITTEOM WIND MILLE LAUNIED DUICK MATES



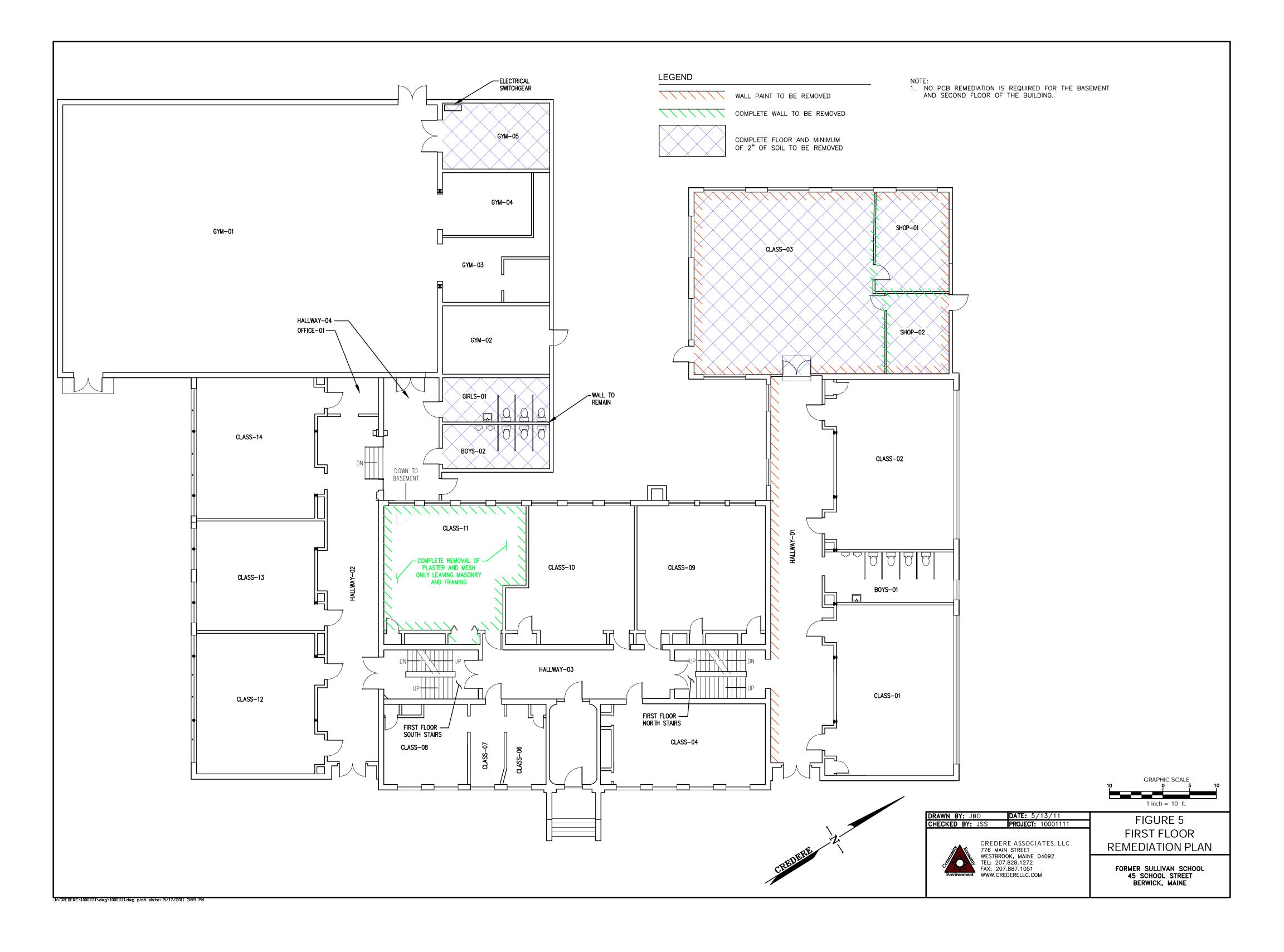
DATE: 3/23/11 **PROJECT:** 10001111 DRAWN BY: JBO
CHECKED BY: JSS

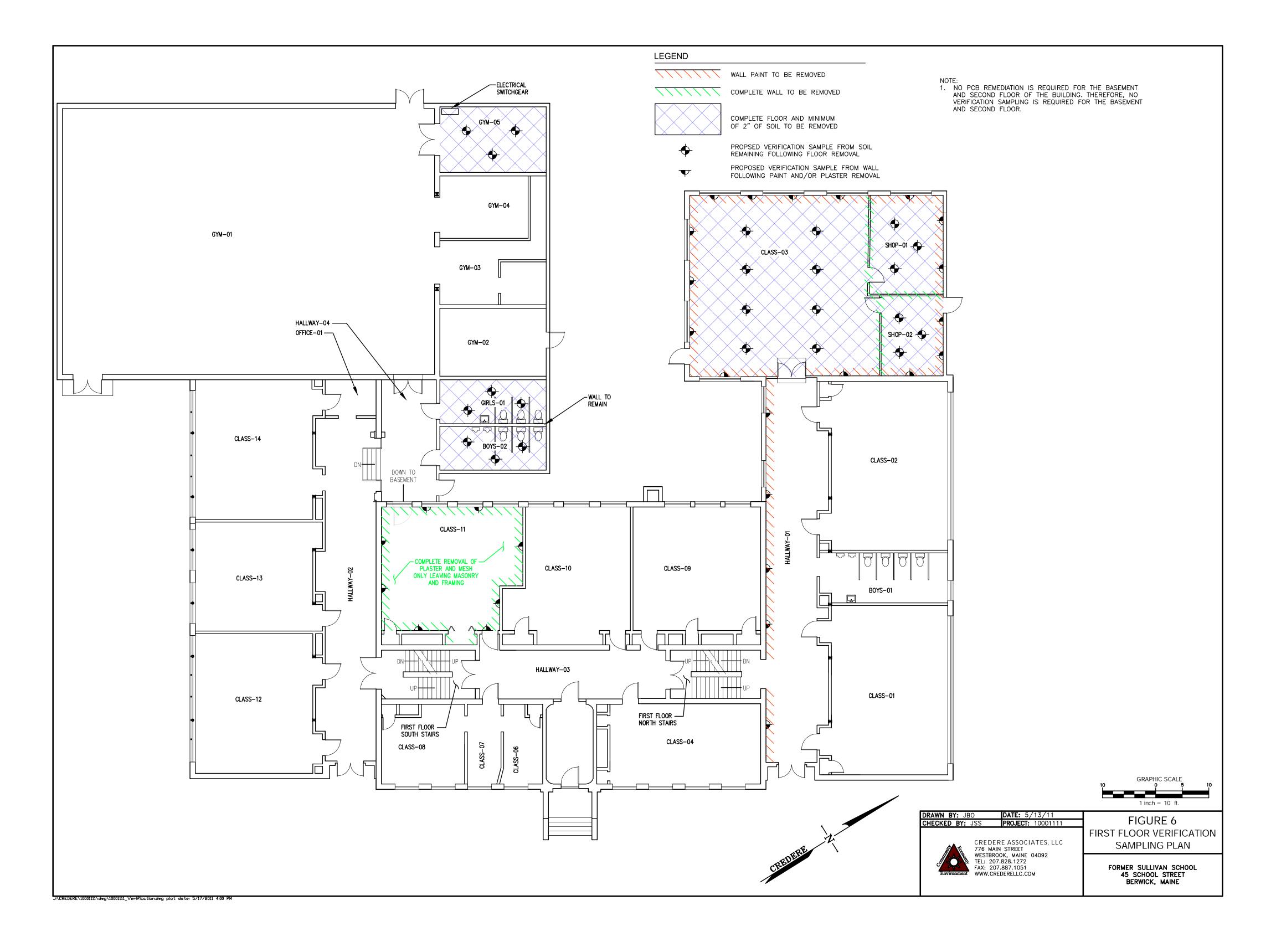


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FIGURE 4 SECOND FLOOR SAMPLE **RESULTS PLAN**

FORMER SULLIVAN SCHOOL 45 SCHOOL STREET BERWICK, MAINE





Appendix A - Site Photographs







BA 01 BA 02

Credere Associates, LLC





BA 03 Closet





BA 03 Wet Wall

BA 04

Credere Associates, LLC



BA 04 Closet



BA 04 Stairs Up To Hallway 04





Basement North Stairs

Boiler 01





Boiler 02 Boiler 03





Boys 01 Boys 02





Class 01 Class 02





Class 03 (Shop)

Class 04





Class 05 Class 06

Credere Associates, LLC





Class 07 Class 08





Class 09 Class 10





Class 11 Class 12





Class 12 Closet

Class 13





Class 14 Class 15





Class 16 Class 17



Class 17 Additional



Class 17 Additional Bath





Class 17 Bath Class 18



Class 18 Additional



Class 19





Class 20 Class 21





Class 22 Class 23



Class 23 North Closet

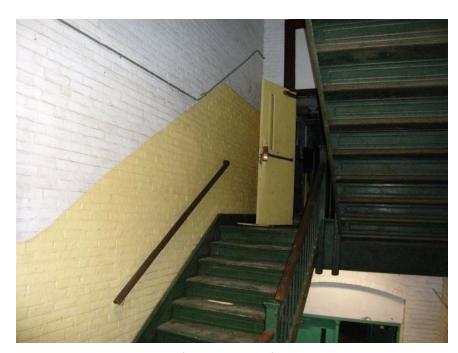


Class 23 South Closet





Class 24 Closet



First Floor North Stairs



First Floor South Stairs





Girls 01 Girls 02





Gym 01 Gym 02





Gym 03 Gym 04

Credere Associates, LLC





Gym 05 Hallway 01





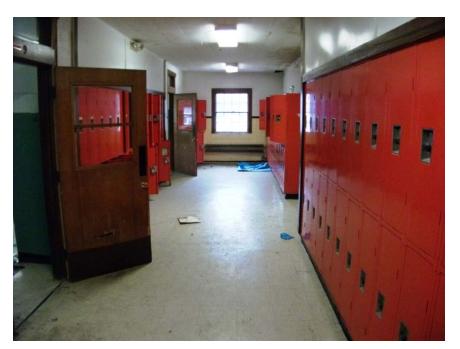
Hallway 02 Hallway 03



Hallway 04



Hallway 04 Stairs to Basement Additional





Hallway 05 Hallway 06





Hallway 07

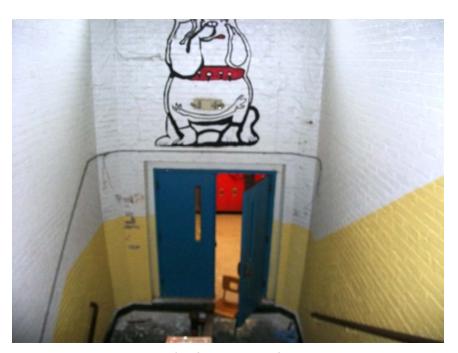
Hallway 07 Closet



Hallway 07 Looking Towards
Basement South Stairs



Office 01



Second Floor Noth Stairs



Second Floor South Stairs





Shop 01 Shop 02

Site Characterization and PCB Cleanup Plan Former Sullivan School 45 School Street, Berwick, Maine May 18, 2011

Appendix B - Initial Laboratory Data, Laboratory QA/QC, Methods, and Chain of Custody



Report Date: 24-Mar-11 11:43



☑ Final Report☐ Re-Issued Report☐ Revised Report

Laboratory Report

Credere Associates, LLC 776 Main Street Westbrook, ME 04092

Attn: Jonathan O'Donnell

Project: Sullivan School-Berwick, ME

Project #: 10001111

Laboratory ID	Client Sample ID	<u>Matrix</u>	Date Sampled	Date Received
SB25844-01	BM-01	Paint	17-Mar-11 15:55	19-Mar-11 09:05
SB25844-02	BM-02	Paint	17-Mar-11 16:00	19-Mar-11 09:05
SB25844-03	BM-03	Paint	17-Mar-11 16:07	19-Mar-11 09:05
SB25844-04	BM-04	Paint	17-Mar-11 16:11	19-Mar-11 09:05
SB25844-05	BM-05	Paint	17-Mar-11 16:14	19-Mar-11 09:05
SB25844-06	BM-06	Paint	17-Mar-11 16:20	19-Mar-11 09:05
SB25844-07	BM-07	Paint	17-Mar-11 16:23	19-Mar-11 09:05
SB25844-08	BM-08	Paint	17-Mar-11 16:29	19-Mar-11 09:05
SB25844-09	BM-09	Paint	17-Mar-11 16:31	19-Mar-11 09:05
SB25844-10	BM-10	Paint	17-Mar-11 16:35	19-Mar-11 09:05
SB25844-11	BM-11	Paint	17-Mar-11 16:40	19-Mar-11 09:05
SB25844-12	BM-12	Paint	17-Mar-11 16:43	19-Mar-11 09:05
SB25844-13	BM-13	Paint	17-Mar-11 16:48	19-Mar-11 09:05
SB25844-14	BM-14	Paint	17-Mar-11 17:00	19-Mar-11 09:05
SB25844-15	BM-15	Paint	17-Mar-11 17:05	19-Mar-11 09:05
SB25844-16	BM-16	Caulk/Glaze	17-Mar-11 17:10	19-Mar-11 09:05
SB25844-17	BM-17	Caulk/Glaze	17-Mar-11 17:16	19-Mar-11 09:05
SB25844-18	BM-18	Caulk/Glaze	17-Mar-11 17:23	19-Mar-11 09:05
SB25844-19	BM-19	Caulk/Glaze	17-Mar-11 17:30	19-Mar-11 09:05
SB25844-20	BM-20	Caulk/Glaze	17-Mar-11 17:45	19-Mar-11 09:05

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.

All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110 Connecticut # PH-0777 Florida # E87600/E87936 Maine # MA138 New Hampshire # 2538 New Jersey # MA011/MA012 New York # 11393/11840 Pennsylvania # 68-04426/68-02924 Rhode Island # 98 USDA # S-51435



Authorized by:

Nicole Leja Laboratory Director

Nicole Leja

Spectrum Analytical holds certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes.

Please note that this report contains 29 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

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CASE NARRATIVE:

The samples were received 6.0 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of \pm 2.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

SW846 8082A

Spikes:

1104848-MS1 Source: SB25844-14

The spike recovery for this QC sample is outside of established control limits due to sample matrix interference.

Aroclor-1260 Aroclor-1260 [2C]

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

Decachlorobiphenyl (Sr)

1104848-MSD1 Source: SB25844-14

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

Decachlorobiphenyl (Sr)

Samples:

SB25844-01 BM-01

The concentration indicated for this analyte is an estimated value. This value is considered an estimate (CLP E-flag).

Aroclor-1254 [2C]

SB25844-01RE1 BM-01

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SB25844-02 BM-02

The concentration indicated for this analyte is an estimated value. This value is considered an estimate (CLP E-flag).

Aroclor-1254 [2C]

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB25844-02RE1 BM-02

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB25844-07 BM-07

SW846 8082A

Samples:

SB25844-07 BM-07

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB25844-09 BM-09

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

Decachlorobiphenyl (Sr)

SB25844-12 BM-12

The concentration indicated for this analyte is an estimated value. This value is considered an estimate (CLP E-flag).

Aroclor-1254

SB25844-12RE1 BM-12

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interference's.

4,4-DB-Octafluorobiphenyl (Sr)

4,4-DB-Octafluorobiphenyl (Sr) [2C]

Decachlorobiphenyl (Sr)

Decachlorobiphenyl (Sr) [2C]

SB25844-13 BM-13

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB25844-15 BM-15

The concentration indicated for this analyte is an estimated value. This value is considered an estimate (CLP E-flag).

Aroclor-1254

SB25844-15RE1 BM-15

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interference's.

4,4-DB-Octafluorobiphenyl (Sr)

4,4-DB-Octafluorobiphenyl (Sr) [2C]

Decachlorobiphenyl (Sr)

Decachlorobiphenyl (Sr) [2C]

SB25844-18 BM-18

The Reporting Limit has been raised to account for matrix interference.

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

Decachlorobiphenyl (Sr)

SW846 8082A

Samples:

SB25844-20 *BM-20*

The Reporting Limit has been raised to account for matrix interference.

BM-01	lentification		Clier	t Project#		Matrix	Colle	ection Date	/Time	Re	<u>ceived</u>	
SB25844-	01		10	0001111		Paint	17	-Mar-11 15	5:55	19-	Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cer
Semivolati	le Organic Compounds by GC											
Polychlori	nated Biphenyls by SW846 8082											
	by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	105	1	SW846 8082A	21-Mar-11	23-Mar-11	IMR	1104848	8 X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	105	1	"	"	"	"	"	Χ
11141-16-5	Aroclor-1232	BRL		μg/kg dry	105	1	"	"	"	•	"	Χ
53469-21-9	Aroclor-1242	BRL		μg/kg dry	105	1	"	"	"	"	"	Χ
12672-29-6	Aroclor-1248	BRL		μg/kg dry	105	1	"	"	"	"	"	Χ
11097-69-1	Aroclor-1254	41,800	E	μg/kg dry	105	1	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	105	1	"	"	"	"		Χ
37324-23-5	Aroclor-1262	BRL		μg/kg dry	105	1	"	u u	"	"		Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	105	1	"	"	"	"	"	Х
Surrogate r	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	105			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	101			30-150 %		u	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	131			30-150 %		"	"	"		"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	126			30-150 %		"	"	"	"	"	
	sis of Polychlorinated Biphenyls by by method SW846 3540C	/ SW846 8082	GS1									
	Aroclor-1016	BRL		μg/kg dry	1050	10	SW846 8082A	21-Mar-11	23-Mar-11	IMR	1104848	8 X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	1050	10	"	"	"	"	"	X
11141-16-5	Aroclor-1232	BRL		μg/kg dry	1050	10	"		"	"		Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	1050	10	"		"	"		X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	1050	10	"		"			X
11097-69-1	Aroclor-1254	40,000		μg/kg dry	1050	10	"		"			X
11096-82-5	Aroclor-1260	BRL		μg/kg dry μg/kg dry	1050	10	"	"	"	"		X
37324-23-5	Aroclor-1262	BRL			1050	10			"	"	"	×
11100-14-4	Aroclor-1268	BRL		μg/kg dry μg/kg dry	1050	10	"			"	"	X
		DILL		μg/kg dry	1000	10						
Surrogate r		405			00.450.0/		"				"	
10386-84-2 10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) 4,4-DB-Octafluorobiphenyl (Sr)	105 125			30-150 % 30-150 %		"	"			"	
0054.64.5	[2C]				,		_	_				
2051-24-3	Decachlorobiphenyl (Sr)	85			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	70			30-150 %		"	"	"	"	"	
General Cl	hemistry Parameters											

94.2

% Solids

SM2540 G Mod. 21-Mar-11 21-Mar-11 BD

1104884

BM-02	<u>entification</u>			nt Project # 0001111		<u>Matrix</u> Paint		ection Date -Mar-11 16			ceived Mar-11	
SB25844-	02											
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cer
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
•	Aroclor-1016	BRL		μg/kg dry	100	1	SW846 8082A	21-Mar-11	23-Mar-11	IMR	1104848	Х
11104-28-2	Aroclor-1221	BRL		μg/kg dry	100	1	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	100	1	"	"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	100	1	"	"	"	"		Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	100	1	"	"	"	"	"	Х
11097-69-1	Aroclor-1254	40,800	E	μg/kg dry	100	1	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	100	1		"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	100	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	100	1	н	"	u	"	"	Х
Surrogate r	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	88			30-150 %		"	"	u	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	11300	S02		30-150 %		u	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	106			30-150 %		"	"	"	"		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	89			30-150 %		"	"	"	"	"	
	is of Polychlorinated Biphenyls b	y SW846 8082	GS1									
	by method SW846 3540C											
	Aroclor-1016	BRL		μg/kg dry	1000	10	SW846 8082A	21-Mar-11	23-Mar-11	IMR	1104848	3 X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	1000	10	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	1000	10	"	"	"	"	"	X
53469-21-9	Aroclor-1242	BRL		μg/kg dry	1000	10	"	"	u	"	"	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	1000	10	"	"	"	"	"	X
11097-69-1	Aroclor-1254	52,300		μg/kg dry	1000	10	"	"	"	"		×
11096-82-5	Aroclor-1260	BRL		μg/kg dry	1000	10	"	"	"	"		Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	1000	10	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	1000	10	"	"	"	"	"	Х
Surrogate r	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	110			30-150 %		II .	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	8360	S02		30-150 %		"	"	"	"	II	
2051-24-3	Decachlorobiphenyl (Sr)	130			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	90			30-150 %				_			

94.5

General Chemistry Parameters
% Solids

SM2540 G Mod. 21-Mar-11 21-Mar-11 BD

1104884

BM-03	325844-03			t Project # 001111		<u>Matrix</u> Paint	'	ection Date -Mar-11 16			<u>ceived</u> Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolat	ile Organic Compounds by GC											
	inated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	98.6	1	SW846 8082A	21-Mar-11	23-Mar-11	IMR	1104848	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	98.6	1		"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	98.6	1		"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	98.6	1	"	"	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	98.6	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	1,720		μg/kg dry	98.6	1	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	98.6	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	98.6	1	"	"	"	"	"	X
11100-14-4	Aroclor-1268	BRL		μg/kg dry	98.6	1	"	"	"	"	"	Χ
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	100			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	76			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	43			30-150 %			"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	42			30-150 %		"	"	"	"		
General C	Chemistry Parameters											

95.5

% Solids

SM2540 G Mod. 21-Mar-11 21-Mar-11

BD 1104884

BM-04	325844-04			<u>t Project #</u> 001111		<u>Matrix</u> Paint	-	ection Date -Mar-11 16	,		<u>ceived</u> Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Polychlorii	le Organic Compounds by GC nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	104	1	SW846 8082A	21-Mar-11	23-Mar-11	IMR	1104848	Х
11104-28-2	Aroclor-1221	BRL		μg/kg dry	104	1		"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	104	1	"	"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	104	1	"	"	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	104	1	"	"	"	"	"	Х
11097-69-1	Aroclor-1254	BRL		μg/kg dry	104	1	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	104	1	"	"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	104	1		"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	104	1	"	"	"	"	"	Χ
Surrogate r	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	79			30-150 %		"	II .	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	43			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	98			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	64			30-150 %		"	"	"	"	"	
General Cl	hemistry Parameters											
	% Solids	96.5		%		1	SM2540 G Mod.	21-Mar-11	21-Mar-11	BD	1104884	

BM-05	B25844-05			nt Project # 001111		<u>Matrix</u> Paint	-	ection Date -Mar-11 16			<u>ceived</u> Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C	2										
12674-11-2	Aroclor-1016	BRL		μg/kg dry	116	1	SW846 8082A	21-Mar-11	23-Mar-11	IMR	1104848	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	116	1	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	116	1	"	"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	116	1	"	"	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	116	1	"	"	"	"	"	Х
11097-69-1	Aroclor-1254	6,380		μg/kg dry	116	1	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	116	1	"	"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	116	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	116	1	· ·	"	"	"	"	Χ
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	103			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	118			30-150 %		"	u	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	139			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	111			30-150 %		"	"	"	"	"	
General C	hemistry Parameters											
	% Solids	83.8		%		1	SM2540 G Mod.	21-Mar-11	21-Mar-11	BD	1104884	

BM-06	325844-06			<u>t Project #</u> 001111		<u>Matrix</u> Paint	-	ection Date -Mar-11 16	,		<u>ceived</u> Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<u>Polychlori</u>	le Organic Compounds by GC nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	111	1	SW846 8082A	21-Mar-11	23-Mar-11	IMR	1104848	Х
11104-28-2	Aroclor-1221	BRL		μg/kg dry	111	1	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	111	1	"	"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	111	1	"	"	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	111	1	"	"	"	"	"	Х
11097-69-1	Aroclor-1254	7,070		μg/kg dry	111	1	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	111	1	"	"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	111	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	111	1	"	n		"	u	Χ
Surrogate r	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	97			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	105			30-150 %		"	II	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	126			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	84			30-150 %		"	"	"	"	"	
General C	hemistry Parameters											
	% Solids	88.4		%		1	SM2540 G Mod.	21-Mar-11	21-Mar-11	BD	1104886	

BM-07	325844-07			<u>t Project #</u> 001111		<u>Matrix</u> Paint		ection Date -Mar-11 16			eceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	90.3	1	SW846 8082A	21-Mar-11	23-Mar-11	IMR	1104848	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	90.3	1	"	u u	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	90.3	1	"	"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	90.3	1	"	"	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	90.3	1	"	"	"	"	"	Х
11097-69-1	Aroclor-1254	3,950		μg/kg dry	90.3	1	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	90.3	1	"	"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	90.3	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	90.3	1	II .	n	"	"	"	Χ
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	99			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	1830	S02		30-150 %		"	u	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	142			30-150 %			"	"	"		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	73			30-150 %			"	"	"		
General C	hemistry Parameters											
	% Solids	95.7		%		1	SM2540 G Mod.	21-Mar-11	21-Mar-11	BD	1104886	

BM-08	B25844-08			<u>t Project #</u> 001111		<u>Matrix</u> Paint	-	ection Date -Mar-11 16			<u>ceived</u> Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
-	nated Biphenyls by SW846 8082 by method SW846 3540C	2										
12674-11-2	Aroclor-1016	BRL		μg/kg dry	103	1	SW846 8082A	21-Mar-11	23-Mar-11	IMR	1104848	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	103	1	"	u u	"	"	"	Χ
11141-16-5	Aroclor-1232	BRL		μg/kg dry	103	1	"	"	"	"	"	Χ
53469-21-9	Aroclor-1242	BRL		μg/kg dry	103	1	"	"	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	103	1	"	"	"	"	"	Χ
11097-69-1	Aroclor-1254	6,360		μg/kg dry	103	1	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	103	1	"	"	"	"	"	Χ
37324-23-5	Aroclor-1262	BRL		μg/kg dry	103	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	103	1	· ·	n	"	"	"	Χ
Surrogate r	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	100			30-150 %		"	II .	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	91			30-150 %		"	II	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	142			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	135			30-150 %		"	"	"	"	"	
General C	hemistry Parameters											
	% Solids	93.6		%		1	SM2540 G Mod.	21-Mar-11	21-Mar-11	BD	1104886	

BM-09	B25844-09			nt Project # 001111		<u>Matrix</u> Paint	-	ection Date -Mar-11 16			eceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolat	ile Organic Compounds by GC											
	inated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	102	1	SW846 8082A	21-Mar-11	23-Mar-11	IMR	1104848	Χ
11104-28-2	Aroclor-1221	BRL		μg/kg dry	102	1	"	"	"	"	"	Χ
11141-16-5	Aroclor-1232	BRL		μg/kg dry	102	1	"	"	"	"	"	Χ
53469-21-9	Aroclor-1242	BRL		μg/kg dry	102	1	"	"	"	"		Χ
12672-29-6	Aroclor-1248	BRL		μg/kg dry	102	1	"	"	"	"		Χ
11097-69-1	Aroclor-1254	4,140		μg/kg dry	102	1	"	"	"	"		Χ
11096-82-5	Aroclor-1260	BRL		μg/kg dry	102	1	"	"	"	"		Χ
37324-23-5	Aroclor-1262	BRL		μg/kg dry	102	1	"	"	"	"	"	Χ
11100-14-4	Aroclor-1268	BRL		μg/kg dry	102	1	"	"	"	"	"	Χ
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	108			30-150 %		"	u u	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	87			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	202	S02		30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	149			30-150 %		"	"	"	"	"	
General C	Chemistry Parameters											
	% Solids	95.7		%		1	SM2540 G Mod.	21-Mar-11	21-Mar-11	BD	1104886	

BM-10	325844-10			<u>t Project #</u> 001111		<u>Matrix</u> Paint		ection Date -Mar-11 16			<u>cceived</u> Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	101	1	SW846 8082A	21-Mar-11	23-Mar-11	IMR	1104848	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	101	1		"	u	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	101	1	n .	"	"	"	"	X
53469-21-9	Aroclor-1242	BRL		μg/kg dry	101	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	101	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	8,020		μg/kg dry	101	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	BRL		μg/kg dry	101	1	"	"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	101	1	"	"	"	"	"	X
11100-14-4	Aroclor-1268	BRL		μg/kg dry	101	1	u	"	u	"	"	Χ
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	84			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	92			30-150 %		"	u	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	115			30-150 %		"	"	"	"		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	97			30-150 %			"	u	"	"	
General C	hemistry Parameters											
	% Solids	95.6		%		1	SM2540 G Mod.	21-Mar-11	21-Mar-11	BD	1104886	

BM-11	B25844-11			<u>t Project #</u> 001111		<u>Matrix</u> Paint		ection Date -Mar-11 16			<u>ceived</u> Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolat	ile Organic Compounds by GC											
	inated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	103	1	SW846 8082A	21-Mar-11	23-Mar-11	IMR	1104848	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	103	1	"	"	"	"	"	Χ
11141-16-5	Aroclor-1232	BRL		μg/kg dry	103	1	"	"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	103	1	"	"	"	"		Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	103	1	"	"	"	"		Х
11097-69-1	Aroclor-1254	1,020		μg/kg dry	103	1	"	"	"	"		Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	103	1	"	"	"	"		Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	103	1	"	"	"	"		Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	103	1	"	"	"	"	"	Χ
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	91			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	88			30-150 %		n .	u	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	123			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	91			30-150 %		"	"	"	"	"	
General C	Chemistry Parameters											

% Solids

96.4

CAS No. Analyse(r) Result Flag Units *RDL Dilution Method Ref. Prepared Analysed Analyse Batch CR	BM-12	lentification_			nt Project #		Matrix		ection Date			ceived	
Seminal and Compounds by CC Compounds by C	SB25844-	-12		10	0001111		Paint	17	-Mar-11 16	5:43	19-	Mar-11	
Property Development Biphenyte by SW846 80820 SW846 80824 SW84	CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cer
Prepare by wethod SW486 3540C	Semivolati	ile Organic Compounds by GC											
1104-28 2000-1-122 2000-1-123 2000-1													
BRL	12674-11-2	Aroclor-1016	BRL		μg/kg dry	145	1	SW846 8082A	21-Mar-11	23-Mar-11	IMR	1104848	X
Sades-21-9 Arcolor-1242 BRL	11104-28-2	Aroclor-1221	BRL		μg/kg dry	145	1	"	"	"	"	"	Х
Section Sect	11141-16-5	Aroclor-1232	BRL		μg/kg dry	145	1	"	"	"	"		Х
Surrogate recoveries:	53469-21-9	Aroclor-1242	BRL		μg/kg dry	145	1	"	"	"	"	"	Х
11096-82-5 Arcolor-1250 BRL µg/kg dry 145 1 " " " " " " " " " " " " " " " " "	12672-29-6	Aroclor-1248	BRL		μg/kg dry	145	1	"	"	"	"	"	Х
Second S	11097-69-1	Aroclor-1254	1,010,000	E	μg/kg dry	145	1	"	"	"	"	"	Х
Surrogate recoveries: Surr	11096-82-5	Aroclor-1260	BRL		μg/kg dry	145	1	"	"	"	"		Х
Surrogate recoveries:	37324-23-5	Aroclor-1262	BRL		μg/kg dry	145	1	"	"	"	"	"	Х
10386-84-2 4,4-DB-Octafluorobiphenyl (Sr) 106 30-150 % " " " " " " " " " " " " " " " " " "	11100-14-4	Aroclor-1268	BRL		μg/kg dry	145	1	· ·	"	"	"	"	Х
10386-84-2 4,4-DB-Octafluorobiphenyl (Sr) 90 30-150 % " " " " " " " " " " " " " " " " " "	Surrogate i	recoveries:											
1100-14-4 14-DB-Octafiluorobiphenyl (Sr) 112 30-150 % " " " " " " " " " " " " "	10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	106			30-150 %		"	u	"	"	"	
2051-24-3 Decachlorobiphenyl (Sr) [2C] 93 30-150 % 2051-2	10386-84-2	.,	90			30-150 %		"	u	"	"	"	
Re-analysis of Polychlorinated Biphenyls by SW846 8082 Prepared by method SW846 3540C 12674-11-2 Aroclor-1016 BRL	2051-24-3	Decachlorobiphenyl (Sr)	112			30-150 %		"	"	"	"	"	
Prepared by method SW846 3540C 12674-11-2 Aroclor-1016 BRL	2051-24-3	Decachlorobiphenyl (Sr) [2C]	93			30-150 %		"	"	"	"	"	
12674-11-2 Aroclor-1016 BRL			<u>y SW846 8082</u>	GS1									
### 11104-28-2 Aroclor-1221 BRL		<u> </u>											
11141-16-5 Aroclor-1232 BRL µg/kg dry 28900 200 " " " " " " " " " " " " " " " " " "					μg/kg dry	28900			21-Mar-11				
53469-21-9 Aroclor-1242 BRL µg/kg dry 28900 200 " " " " " " " " " " 12672-29-6 Aroclor-1248 BRL µg/kg dry 28900 200 " " " " " " " " " " " " " " " " "						28900			"				Х
12672-29-6 Aroclor-1248 BRL µg/kg dry 28900 200 " " " " " " " " " " " " " " " " "	11141-16-5	Aroclor-1232	BRL		μg/kg dry	28900	200		"				Х
11097-69-1 Aroclor-1254 1,430,000 µg/kg dry 28900 200 "	53469-21-9	Aroclor-1242	BRL		μg/kg dry	28900	200	"					Х
11096-82-5 Aroclor-1260 BRL µg/kg dry 28900 200 " " " " " " " " " " " " " " " " "	12672-29-6	Aroclor-1248			μg/kg dry	28900	200						Х
37324-23-5 Aroclor-1262 BRL µg/kg dry 28900 200 " " " " " " " " " " " " " " " " "	11097-69-1	Aroclor-1254	1,430,000		μg/kg dry	28900	200	"	"			"	Х
Aroclor-1262 BRL µg/kg dry 28900 200 " " " " " " " " " " " " " " " " "	11096-82-5	Aroclor-1260	BRL		μg/kg dry	28900	200	"	"	"	"	"	X
Surrogate recoveries: 10386-84-2	37324-23-5	Aroclor-1262	BRL		μg/kg dry	28900	200	"	"	"	"	"	Х
10386-84-2 4,4-DB-Octafluorobiphenyl (Sr) 0 S01 30-150 % " " " " " " " " " " " " " " " " " "	11100-14-4	Aroclor-1268	BRL		μg/kg dry	28900	200	"	"	"	"	"	X
10386-84-2 4,4-DB-Octafluorobiphenyl (Sr) 0 S01 30-150 % " " " " " " " " " " " " " " " " " "	Surrogate i	recoveries:											
[2C] 2051-24-3 Decachlorobiphenyl (Sr) 0 S01 30-150 % " " " " " "	10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	0	S01		30-150 %		"	"	"	"	"	
	10386-84-2		0	S01		30-150 %		"	u	"	"	"	
2051-24-3 Decachlorobiphenyl (Sr) [2C] 0 S01 30-150 % " " " " "	2051-24-3	Decachlorobiphenyl (Sr)	0	S01		30-150 %		"	"	"	"	"	
	2051-24-3	Decachlorobiphenyl (Sr) [2C]	0	S01		30-150 %			"	"	"		

68.9

General Chemistry Parameters
% Solids

SM2540 G Mod. 21-Mar-11 21-Mar-11 BD

1104886

BM-13	Sample Identification BM-13 BB25844-13			nt Project #		<u>Matrix</u> Paint		ection Date -Mar-11 16			<u>ceived</u> Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	109	1	SW846 8082A	21-Mar-11	23-Mar-11	IMR	1104848	Х
11104-28-2	Aroclor-1221	BRL		μg/kg dry	109	1	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	109	1	"	"	u	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	109	1	"	"	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	109	1	"	"	"	"	"	Х
11097-69-1	Aroclor-1254	7,520		μg/kg dry	109	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	BRL		μg/kg dry	109	1	"	"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	109	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	109	1	"	"	•	"	"	Χ
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	101			30-150 %		"	"	u	•	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	10700	S02		30-150 %		n .	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	148			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	99			30-150 %		"	"	u u	"	"	
General C	hemistry Parameters											

% Solids

91.0

BM-14	Sample Identification BM-14 BB25844-14			t Project # 001111		<u>Matrix</u> Paint		ection Date -Mar-11 17			<u>cceived</u> Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
	ile Organic Compounds by GC inated Biphenyls by SW846 8082											
<u>Prepared</u>	by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	93.1	1	SW846 8082A	21-Mar-11	23-Mar-11	IMR	1104848	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	93.1	1	"	"	"	"	"	Χ
11141-16-5	Aroclor-1232	BRL		μg/kg dry	93.1	1	"	u u	"	"	"	Χ
53469-21-9	Aroclor-1242	BRL		μg/kg dry	93.1	1	"	"	u	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	93.1	1	"	u u	"	"	"	Х
11097-69-1	Aroclor-1254	482		μg/kg dry	93.1	1	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	93.1	1	"	"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	93.1	1	"	"	"			Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	93.1	1	"	"	"	"	"	Х
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	97			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	94			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	131			30-150 %		"	u u	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	82			30-150 %		"	"	"	"	"	
General C	Themistry Parameters											
	% Solids	97.6		%		1	SM2540 G Mod.	21-Mar-11	21-Mar-11	BD	1104886	

BM-15	ample Identification BM-15 B25844-15			<u>nt Project #</u> 0001111		<u>Matrix</u> Paint	· · · · · · · · · · · · · · · · · · ·	ection Date '-Mar-11 17			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cer
Semivolati	lle Organic Compounds by GC											
	nated Biphenyls by SW846 8082											
	by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	147	1	SW846 8082A	21-Mar-11	23-Mar-11	IMR	1104848	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	147	1	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	147	1	"	"	"	"	"	Х
3469-21-9	Aroclor-1242	BRL		μg/kg dry	147	1		"	"	"	"	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	147	1	"	"	"	"		X
11097-69-1	Aroclor-1254	704,000	E	μg/kg dry	147	1	"	"	"	"		X
11096-82-5	Aroclor-1260	BRL		μg/kg dry	147	1	"	"	"	"		X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	147	1	"	"	"		"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	147	1	"	п	"	"	"	Х
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	111			30-150 %			"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	99			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	121			30-150 %			"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	88			30-150 %			"	u	"	"	
	sis of Polychlorinated Biphenyls b by method SW846 3540C	y SW846 8082	GS1									
12674-11-2	Aroclor-1016	BRL		μg/kg dry	29400	200	SW846 8082A	21-Mar-11	23-Mar-11	IMR	1104848	×
11104-28-2	Aroclor-1221	BRL		μg/kg dry	29400	200	"	"	"		"	Х
1141-16-5	Aroclor-1232	BRL		μg/kg dry	29400	200	"	"	"		"	>
3469-21-9	Aroclor-1242	BRL		μg/kg dry	29400	200	"	"	"	"		>
2672-29-6	Aroclor-1248	BRL		μg/kg dry	29400	200	"	"	"	"	"	>
1097-69-1	Aroclor-1254	1,080,000		μg/kg dry	29400	200	"	"	"	"	"	>
11096-82-5	Aroclor-1260	BRL		μg/kg dry	29400	200	"	"	"	"		>
37324-23-5	Aroclor-1262	BRL		μg/kg dry	29400	200		"	"			X
11100-14-4	Aroclor-1268	BRL		μg/kg dry	29400	200	"	"	"	"	"	×
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	0	S01		30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	0	S01		30-150 %		"	u	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	0	S01		30-150 %		n .	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	0	S01		30-150 %		"	"	"	"	"	
General C	hemistry Parameters											

Sample Identification

% Solids

65.8

SM2540 G Mod. 21-Mar-11 21-Mar-11 BD

1104886

BM-16	Sample Identification BM-16 B25844-16		Client Proje		<u>Matr</u> Caulk/C		lection Date 7-Mar-11 1	,	-	eceived Mar-11	
CAS No.	Analyte(s)	Result	Flag Uni	ts *R	DL Dilutio	n Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolat	ile Organic Compounds by GC										
	inated Biphenyls by SW846 8082 by method SW846 3540C										
12674-11-2	Aroclor-1016	BRL	μg/kg	dry 17	7 1	SW846 8082A	21-Mar-11	23-Mar-11	IMR	1104848	8 X
11104-28-2	Aroclor-1221	BRL	μg/kg	dry 17	7 1	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL	μg/kg	dry 17	7 1	"	"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL	μg/kg	dry 17	7 1	"	n n	"	"	"	Х
12672-29-6	Aroclor-1248	BRL	μg/kg	dry 17	7 1	"	"	"	"	"	Х
11097-69-1	Aroclor-1254	364	μg/kg	dry 17	7 1	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL	μg/kg	dry 17	7 1	"	"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL	μg/kg	dry 17	7 1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL	μg/kg	dry 17	7 1	"	"	"	"	u u	Χ
Surrogate	recoveries:										
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	113		30-15) %	·	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	113		30-15) %	"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	144		30-15) %	"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	111		30-15	%	"	"	"	"	"	
General C	hemistry Parameters										

% Solids

97.2

BM-17	Sample Identification BM-17 SB25844-17		Client Project # 10001111		<u>Matrix</u> Caulk/Gla		ection Date -Mar-11 17			<u>ceived</u> Mar-11	
CAS No.	Analyte(s)	Result	Flag Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC										
	nated Biphenyls by SW846 8082 by method SW846 3540C										
12674-11-2	Aroclor-1016	BRL	μg/kg dry	169	1	SW846 8082A	21-Mar-11	23-Mar-11	IMR	1104848	Х
11104-28-2	Aroclor-1221	BRL	μg/kg dry	169	1		"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL	μg/kg dry	169	1		"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL	μg/kg dry	169	1	"	"	"	"	"	Х
12672-29-6	Aroclor-1248	BRL	μg/kg dry	169	1	"	u u	"	"		Х
11097-69-1	Aroclor-1254	BRL	μg/kg dry	169	1	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL	μg/kg dry	169	1		"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL	μg/kg dry	169	1	"	u u	"	"		Х
11100-14-4	Aroclor-1268	BRL	μg/kg dry	169	1	"	"	"	"	"	Χ
Surrogate i	recoveries:										
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	119		30-150 %			"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	118		30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	120		30-150 %			"	u	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	116		30-150 %			"	u	"	"	
General C	hemistry Parameters										

% Solids

96.4

BM-18 SB25844-	lentification			tt Project # 001111		<u>Matrix</u> Caulk/Gla		ection Date '-Mar-11 17			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C		R01									
12674-11-2	Aroclor-1016	BRL		μg/kg dry	950	5	SW846 8082A	21-Mar-11	23-Mar-11	IMR	1104848	Х
11104-28-2	Aroclor-1221	BRL		μg/kg dry	950	5		"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	950	5		"	"	"	"	X
53469-21-9	Aroclor-1242	BRL		μg/kg dry	950	5		"	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	950	5		"	"	"	"	Х
11097-69-1	Aroclor-1254	BRL		μg/kg dry	950	5		"	"	"	"	X
11096-82-5	Aroclor-1260	BRL		μg/kg dry	950	5	"	"	"	"	"	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	950	5		"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	950	5	"	"	"	"	u	Χ
Surrogate r	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	60			30-150 %		"	n n	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	60			30-150 %		"	n .	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	820	S02		30-150 %		· ·	"	u u	"	"	

30-150 %

SM2540 G Mod. 21-Mar-11 21-Mar-11

BD

1104886

%

2051-24-3

Decachlorobiphenyl (Sr) [2C]

General Chemistry Parameters
% Solids

95

96.2

BM-19	SB25844-19			<u>t Project #</u> 001111		<u>Matrix</u> Caulk/Gla		ection Date -Mar-11 17			eceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolat	ile Organic Compounds by GC											
	inated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	195	1	SW846 8082A	21-Mar-11	23-Mar-11	IMR	1104848	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	195	1	"	"	"	"	"	Χ
11141-16-5	Aroclor-1232	BRL		μg/kg dry	195	1	"	"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	195	1	"	"	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	195	1	"	"	"	"	"	Х
11097-69-1	Aroclor-1254	BRL		μg/kg dry	195	1	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	195	1	"	"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	195	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	195	1	"	"	"	"	"	Χ
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	96			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	94			30-150 %		"	u	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	139			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	114			30-150 %		"	"	"	"	"	
General C	Chemistry Parameters											

95.5

% Solids

BM-20 SB25844-	lentification			nt Project # 0001111		<u>Matrix</u> Caulk/Gla		ection Date -Mar-11 17			ceived Mar-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C		R01									
12674-11-2	Aroclor-1016	BRL		μg/kg dry	964	5	SW846 8082A	21-Mar-11	23-Mar-11	IMR	1104848	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	964	5	"	"	"	"		Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	964	5	"	"	"	"		Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	964	5		"	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	964	5		"	"	"	"	Х
11097-69-1	Aroclor-1254	BRL		μg/kg dry	964	5		u u	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	964	5		"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	964	5	"	u u	u u	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	964	5	"	"	"	"	"	Χ
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	135			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	97			30-150 %		"	u	H .	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	125			30-150 %		· ·	"	"		"	

30-150 %

SM2540 G Mod. 21-Mar-11 21-Mar-11

BD

1104886

%

2051-24-3

Decachlorobiphenyl (Sr) [2C]

General Chemistry Parameters
% Solids

92

97.4

Semivolatile Organic Compounds by GC - Quality Control

nalyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPI Limi
atch 1104848 - SW846 3540C										
Blank (1104848-BLK1)					Pre	pared: 21-l	Mar-11 An	alyzed: 23-M	ar-11	
Aroclor-1016	BRL		μg/kg wet	100						
Aroclor-1016 [2C]	BRL		μg/kg wet	100						
Aroclor-1221	BRL		μg/kg wet	100						
Aroclor-1221 [2C]	BRL		μg/kg wet	100						
Aroclor-1232	BRL		μg/kg wet	100						
Aroclor-1232 [2C]	BRL		μg/kg wet	100						
Aroclor-1242	BRL		μg/kg wet	100						
Aroclor-1242 [2C]	BRL		μg/kg wet	100						
Aroclor-1248	BRL		μg/kg wet	100						
Aroclor-1248 [2C]	BRL		μg/kg wet	100						
Aroclor-1254	BRL		μg/kg wet	100						
Aroclor-1254 [2C]	BRL		μg/kg wet	100						
Aroclor-1260	BRL		μg/kg wet	100						
Aroclor-1260 [2C]	BRL		μg/kg wet	100						
Aroclor-1262	BRL		μg/kg wet	100						
Aroclor-1262 [2C]	BRL		μg/kg wet μg/kg wet	100						
Aroclor-1268	BRL		μg/kg wet	100						
Aroclor-1268 [2C]	BRL			100						
			μg/kg wet	100						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	98.0		μg/kg wet		100		98	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	96.0		μg/kg wet		100		96	30-150		
Surrogate: Decachlorobiphenyl (Sr)	115		μg/kg wet		100		115	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	105		μg/kg wet		100		105	30-150		
LCS (1104848-BS1)					<u>Pre</u>	epared: 21-l	Mar-11 An	alyzed: 23-M	<u>ar-11</u>	
Aroclor-1016	1180		μg/kg wet	100	1250		94	50-140		
Aroclor-1016 [2C]	1040		μg/kg wet	100	1250		83	50-140		
Aroclor-1260	1320		μg/kg wet	100	1250		106	50-140		
Aroclor-1260 [2C]	1190		μg/kg wet	100	1250		96	50-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	89.0		μg/kg wet		100		89	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	82.0		μg/kg wet		100		82	30-150		
Surrogate: Decachlorobiphenyl (Sr)	141		μg/kg wet		100		141	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	147		μg/kg wet		100		147	30-150		
LCS Dup (1104848-BSD1)					Pre	epared: 21-l	Mar-11 An	alyzed: 23-M	ar-11	
Aroclor-1016	1140		μg/kg wet	100	1250		91	50-140	3	30
Aroclor-1016 [2C]	1040		μg/kg wet	100	1250		83	50-140	0.2	30
Aroclor-1260	1310		μg/kg wet	100	1250		105	50-140	1	30
Aroclor-1260 [2C]	1140		μg/kg wet	100	1250		91	50-140	5	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	94.5		μg/kg wet		100		94	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	91.5		μg/kg wet		100		92	30-150		
Surrogate: Decachlorobiphenyl (Sr)	146		μg/kg wet		100		146	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	148		μg/kg wet		100		148	30-150		
Duplicate (1104848-DUP1)			Source: SB	25844_14		nared: 21-l		alyzed: 23-M	ar ₋ 11	
Aroclor-1016	BRL		μg/kg dry	98.6	1.10	BRL	u. 11 All	, <u></u> 00. <u></u>	<u>~ 1</u>	40
Aroclor-1016 [2C]	BRL		μg/kg dry μg/kg dry	98.6		BRL				40
Aroclor-1221	BRL		μg/kg dry μg/kg dry	98.6		BRL				40
Aroclor-1221 [2C]	BRL		μg/kg dry μg/kg dry	98.6		BRL				40
Aroclor-1232	BRL		μg/kg dry μg/kg dry	98.6		BRL				40
Aroclor-1232 [2C]	BRL			98.6		BRL				40
Aroclor-1242	BRL		μg/kg dry	98.6		BRL				40
			μg/kg dry							
Aroclor-1242 [2C]	BRL		μg/kg dry	98.6		BRL				40
Aroclor-1248	BRL		µg/kg dry	98.6		BRL				40

Semivolatile Organic Compounds by GC - Quality Control

					Spike	Source		%REC		RPD
nalyte(s)	Result	Flag	Units	*RDL	Level	Result	%REC	Limits	RPD	Limi
atch 1104848 - SW846 3540C										
Duplicate (1104848-DUP1)			Source: SB	<u> 25844-14</u>	<u>Pre</u>	pared: 21-	Mar-11 An	alyzed: 23-N	/lar-11	
Aroclor-1248 [2C]	BRL		μg/kg dry	98.6		BRL				40
Aroclor-1254	545		μg/kg dry	98.6		482			12	40
Aroclor-1254 [2C]	572		μg/kg dry	98.6		456			23	40
Aroclor-1260	BRL		μg/kg dry	98.6		BRL				40
Aroclor-1260 [2C]	BRL		μg/kg dry	98.6		BRL				40
Aroclor-1262	BRL		μg/kg dry	98.6		BRL				40
Aroclor-1262 [2C]	BRL		μg/kg dry	98.6		BRL				40
Aroclor-1268	BRL		μg/kg dry	98.6		BRL				40
Aroclor-1268 [2C]	BRL		μg/kg dry	98.6		BRL				40
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	100		μg/kg dry		98.6		102	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	125		μg/kg dry		98.6		127	30-150		
Surrogate: Decachlorobiphenyl (Sr)	129		μg/kg dry		98.6		131	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	98.1		μg/kg dry		98.6		100	30-150		
Matrix Spike (1104848-MS1)			Source: SB	<u> 25844-14</u>	<u>Pre</u>	pared: 21-	Mar-11 An	alyzed: 23-N	<u>//ar-11</u>	
Aroclor-1016	1370		μg/kg dry	94.0	1180	BRL	116	40-135		
Aroclor-1016 [2C]	1410		μg/kg dry	94.0	1180	BRL	120	40-135		
Aroclor-1260	1670	QM1	μg/kg dry	94.0	1180	BRL	142	40-135		
Aroclor-1260 [2C]	1680	QM1	μg/kg dry	94.0	1180	BRL	143	40-135		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	134		μg/kg dry		94.0		143	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	133		μg/kg dry		94.0		141	30-150		
Surrogate: Decachlorobiphenyl (Sr)	187	S02	μg/kg dry		94.0		199	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	137		μg/kg dry		94.0		146	30-150		
Matrix Spike Dup (1104848-MSD1)			Source: SB	<u> 25844-14</u>	Pre	pared: 21-	Mar-11 An	alyzed: 23-N	/lar-11	
Aroclor-1016	1020		μg/kg dry	84.2	1050	BRL	97	40-135	18	30
Aroclor-1016 [2C]	1040		μg/kg dry	84.2	1050	BRL	99	40-135	19	30
Aroclor-1260	1330		μg/kg dry	84.2	1050	BRL	126	40-135	12	30
Aroclor-1260 [2C]	1240		μg/kg dry	84.2	1050	BRL	118	40-135	19	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	95.9		μg/kg dry		84.2		114	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	102		μg/kg dry		84.2		121	30-150		
Surrogate: Decachlorobiphenyl (Sr)	146	S02	μg/kg dry		84.2		174	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	106		μg/kg dry		84.2		126	30-150		

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1104886 - General Preparation										
Duplicate (1104886-DUP1)			Source: SI	<u>325844-06</u>	Pre	epared & A	nalyzed: 21-	-Mar-11		
% Solids	83.1	%			88.4			6	20	

Notes and Definitions

E The concentration indicated for this analyte is an estimated value. This value is considered an estimate (CLP E-flag).

GS1 Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

QM1 The spike recovery for this QC sample is outside of established control limits due to sample matrix interference.

R01 The Reporting Limit has been raised to account for matrix interference.

The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration

and/or matrix interference's.

S02 The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic

compounds present in the sample extract.

BRL Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit

dry Sample results reported on a dry weight basis

NR Not Reported

RPD Relative Percent Difference

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC.

<u>Laboratory Control Sample (LCS)</u>: A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

<u>Matrix Spike</u>: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

<u>Method Blank</u>: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

<u>Surrogate</u>: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

<u>Continuing Calibration Verification:</u> The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

Validated by: June O'Connor Nicole Leja



REDEZE ASSOCIATES LLC

Invoice To:

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Special Handling:

Location: 5	Site Name:	Project No.:	FODY RECORD of 2
STRUCK State: ME	10001111	Project No. / SULLIVAN SCHOOL	☐ Standard TAT - 7 to 10 business days ■ Rush TAT - Date Needed: 3/22// All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes. Samples disposed of after 60 days unless otherwise instructed.

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							1623		BM-07	S.
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MA DEP MCP CAM Report: Yes No	Analyses:)	Containers:				=Sludge $A = A$ ir	2	Water	O=Oil SW= Surface
additional charges may apply	-	7		מ			West	1	h	DW-Drink:
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	Page \sim of \sim Samples	ر - Min. 24-		CI ICTODY RECORD Rush T.	☐ Standar
otherwise instructed.	Samples disposed of after 60 days unless	· Min. 24-hour notification needed for rushes.	All TATs subject to laboratory approval.	Rush TAT - Date Needed: 3/22/	☐ Standard TAT - 7 to 10 business days

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2 Your Internal Billing Reference

3 To Recipient'S SAMPLE RECEIVING

Company SPECTRUM

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Use this line for the HOLD location address or for continuation of your shipping address.

Rev. Date 2/10 + Part #158279 + ©1994-2010 FedEx + PRINTED IN U.S.A. SRS

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Site Characterization and PCB Cleanup Plan Former Sullivan School 45 School Street, Berwick, Maine May 18, 2011

Appendix C – Site Ownership Information



Site Ownership Information Former Sullivan School 45 School Street Berwick, Maine 03901

Current Owner: Town of Berwick, Maine

Contact: Keith Trefethen, Town Manager

11 Sullivan St.

Berwick, Maine 03901 Phone (207) 698-1101 Fax (207) 698-5181

Future Owner During Remedial Actions:

Sullivan School Associates, LP Contact: Nathan Bateman 245 Commercial Street Portland, Maine 04101 Phone (207) 772-2992



Site Characterization and PCB Cleanup Plan Former Sullivan School 45 School Street, Berwick, Maine May 18, 2011

Appendix D - Standard Operating Procedures



STANDARD OPERATING PROCEDURE FOR SAMPLING POROUS SURFACES FOR POLYCHLORINATED BIPHENYLS (PCBs)

The Office of Environmental Measurement and Evaluation EPA New England – Region 1 11 Technology Dr. North Chelmsford, MA 01863

Prepared by:	Dan Granz, Environmental Engineer	9/16/08 Date
Reviewed by:	Kim Tisa, TSCA PCB Coordinator	<u> 10 14 2008</u> Date
Reviewed by:	Jerry Keefe – EIA Team Leader	10/21/2008 Date
Approved by:	Ernest Waterman, EIA Manager]0/21/2∞8 Date

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This document contains direction developed solely to provide internal guidance to U.S. Environmental Protection Agency (EPA) personnel. EPA retains the discretion to adopt approaches that differ from these procedures on a case by case basis. The procedures set forth do not create any rights, substantive or procedural, enforceable at law by a party to litigation with EPA or the United States.

Revision Page

Date	Rev#	Summary of Changes	Sections
12/97	1	Initial Approval, draft	
3/20/08	2	Major update, only for PCBs, added TSCA sampling	All sections
7/22/08	3	Disposal of dust filter and decon of vac hose	11.0 and 14.0
		,	
		·	

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9.0	Sample Collection.	7
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12.0	Data and Record Management.	9
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Attachments:

Example of Custody Seal and Sample Label Example of Chain of Custody Form

1.0 Scope and Application

- 1.1 This Standard Operating Procedure (SOP) is suitable for collection of a porous matrix sample for analysis of Polychlorinated Biphenyls (PCBs).
- 1.2 This SOP describes sampling techniques for both hard and soft porous surfaces.
 - 1.2.1 Hard surfaces, and most soft surfaces, can be sampled using an impact hammer drill to generate a uniform, finely ground, powder to be extracted and analyzed for PCBs. This procedure is primarily geared at providing enough sample quantity for two analyses. Hard porous surfaces include concrete, brick, asphalt, cement, sandstone, limestone, unglazed ceramics, and other possible PCB suspected material. This procedure may also be used on other softer porous surfaces, such as wood.
 - 1.2.2 Soft surfaces can be sampled using a chisel or sharp knife to generate a representative sample to be extracted and analyzed for PCBs. Soft porous surfaces include wood, wall plasterboard, low density plastics, rubber, caulking, and other PCB suspected material.
- 1.3 This SOP provides for collection of surface samples (0 0.5 inches) and delineation of PCB contamination throughout the core of the porous surface. The procedure can be used to sample the porous surface at distinctly different depth zones.

2.0 Method Summary

A one-inch or other sized diameter carbide drill bit is used in a rotary impact hammer drill to generate a fine powder, or other representative sample, suitable for extraction and analysis of PCBs from porous surfaces. This method also allows the use of chisels or knives for the collection of samples from soft porous surfaces for PCB analysis.

3.0 Definitions

- 3.1 Field/Bottle Blank: A sample container of the same lot as the containers used for the environmental samples. This evaluates PCB contamination introduced from the sample container(s) from a common lot.
- 3.2 Equipment/Rinse/Rinsate Blanks: A sample that is collected by pouring hexane over the sample collection equipment after decontamination and before sample collection. The sample is collected in the appropriate sample container identical to the sample containers. This represents background contamination resulting from the field equipment, sampling procedure, sample container, and shipment.

- 3.3 Field Replicates/Duplicates: Two or more samples collected at the same sampling location. Field replicates should be samples collected side by side. Field replicates represent the precision of the whole method, site heterogeneity, field sampling, and the laboratory analysis.
- 3.4 Field Split Samples: Two or more representative subsamples taken from one environmental sample in the field. Prior to splitting, the environmental sample is homogenized to correct for sample heterogeneity that would adversely impact data comparability. Field split samples are usually analyzed by different laboratories (interlaboratory comparison) or by the same laboratory (intralaboratory comparison). Field splits are used to assess sample handling procedures from field to laboratory and laboratory comparability.
- 3.5 Laboratory Quality Samples: Additional samples that will be collected for the laboratory's quality control program: matrix spike, matrix spike duplicate, laboratory duplicates, etc.
- 3.6 Proficiency Testing (PT)/Performance Evaluation (PE) Sample: A sample, the composition of which is unknown to the laboratory or analyst, provided to the analyst or laboratory to assess the capability to produce results within acceptable criteria. This is optional depending on the data quality objectives. If possible, it is recommended that the PE sample be of similar matrix as the porous surface(s) being sampled.
- 3.7 Porous Surface: Any surface that allows PCBs to penetrate or pass into itself including, but not limited to, paint or coating on metal; corroded metal; fibrous glass or glass wool; unglazed ceramics; ceramics with porous glaze; porous building stone such as sandstone, travertine, limestone, or coral rock; low density plastics such as Styrofoam and low density polyethylene; coated (varnished or painted) or uncoated wood; painted or unpainted concrete or cement; plaster; plasterboard; wallboard; rubber; caulking; fiberboard; chipboard; asphalt; or tar paper.
- 3.8 Shipping Container Temperature Blank: A water sample that is transported to the laboratory to measure the temperature of the samples in the cooler.

4.0 Health and Safety

- 4.1 Eye, respiratory, and hearing protection are required at all times during sample drilling. A properly fitted respirator is required for hard porous surface sampling. A respirator is recommended whenever there is a risk of inhalation of either particulate or volatilized PCBs during sampling.
- 4.2 All proper personal protection clothing and equipment must be worn.

- 4.3 When working with potentially hazardous materials or situations, follow EPA, OSHA, and specific health or safety procedures.
- 4.4 Care must be exercised when using an electrical drill and sharp cutting objects.

5.0 Interferences and Potential Problems

- 5.1 This sampling technique produces a finely ground uniform powder, which minimizes the physical matrix effects from variations in the sample consistency (i.e., particle size, uniformity, homogeneity, and surface condition). Matrix spike analysis of a sample is highly recommended to monitor for any matrix related interferences.
- 5.2 Nitrile gloves are recommended. Latex gloves must not be used due to possible phthalate contamination.
- 5.3 Interferences may result from using contaminated equipment, solvents, reagents, sample containers, or sampling in a disturbed area. The drill bit must be decontaminated between samples. (see Section 11.0.)
- 5.4 Cross contamination problems can be eliminated or minimized through the use of dedicated sampling equipment.

6.0 Personnel Qualifications

- 6.1 All field samplers working at hazardous materials/waste sites are required to take a 40 hour health and safety training course prior to engaging in any field activities. Subsequently, an 8 hour refresher health and safety course is required annually.
- 6.2 The field sampler should be trained by an experienced sampler before initiating this procedure.
- All personnel shall be responsible for complying with all quality assurance/quality control requirements that pertain to their organizational/technical function.

7.0 Equipment and Supplies

7.1 This list varies with the matrix and if depth profiling is required

Rotary impact hammer variable speed drill 1-inch or other suitable (1/2, 3/4, etc.) diameter carbide tip drill bits Steel chisel or sharp cutting knife, and hammer Brush and cloths to clean area Stainless steel scoopulas

Aluminum foil to collect the powder sample
1 quart Cubitainer with the top cut out to collect the powder sample
Aluminum weighing pans to collect the powder sample
Cleaned glass container (2 oz or 40 mL) with Teflon lined cap
Decontamination supplies: hexane, two small buckets, a scrub brush, detergent,
deionized water, hexane squirt bottle, and paper towels
Dedicated vacuum cleaner with a disposable filter or a vacuum pump with a dust filter
Sample tags/labels, custody seals, and Chain-of-Custody form

8.0 Sampling Design

- 8.1 A sufficient number of samples must be collected to meet the data quality objectives of the project. If the source of the PCB contamination is regulated under the federal TSCA PCB Regulations at 40 CFR Part 761, the sampler should insure that the sampling design is sufficient to meet any investigation or verification sampling requirements. At a minimum, the following is recommended:
 - 8.1.1 Suspected stained area (s) should be sampled.
 - 8.1.2 At each separate location, collect at least 3 samples of each type of porous surface, regardless of the amount of each type of porous surface present.
 - 8.1.3 In areas where PCB equipment was used or where PCBs were stored, samples should be collected at a frequency of 1 sample/100 square feet (ft²).

9.0 Sample Collection

9.1 Hard Porous Surfaces

- 9.1.1 Lock a 1-inch or another size diameter carbide drill bit into the impact hammer drill and plug the drill into an appropriate power source. For easy identification, sample locations may be pre-marked using a marker or paint. (Note: the actual drilling point must not be marked.) Remove any debris with a clean brush or cloth prior to drilling. All sampling decisions of this nature should be noted in the sampling logbook.
- 9.1.2 Use a Cubitainer with the top cut off or aluminum foil to contain the powdered sample. Begin drilling in the designated location. Apply steady even pressure and let the drill do the work. Applying too much pressure will generate excessive heat and dull the drill bit prematurely. The drill will provide a finely ground powder that can be easily collected.

- 9.1.3 Samples should be collected at 1/2-inch depth intervals. Thus, the initial surface sample should be collected from 0 0.5 inches. A 1/2-inch deep hole generates about 10 grams (20 mL) of powder. Multiple holes located closely adjacent to each other, may be needed to generate sufficient sample volumes for a PCB determination. It is strongly recommended that the analytical laboratory be consulted on the minimum sample size needed for PCB extraction and analysis.
- 9.1.4 Wall and Ceiling Sampling: A team of two samplers will be required for wall and ceiling sampling. The second person will hold a clean catch surface (e.g. an aluminum pan) below the drill to collect the falling powder. Alternatively, use the chuck-end of the drill bit and punch a hole through the center of the collection pan. The drill bit is then mounted through the pan and into the drill. For ceilings, the drill may be held at an angle to collect the powder. Thus the driller can be drilling at an angle while the assistant steadies the pan to catch the falling powder. As a precaution, it may be advantageous to tape a piece of plastic around the drill, just below the chuck, to avoid dust contaminating the body of the drill and entering the drill's cooling vents. Caution must be taken to prevent obstruction of the drill's cooling vents.

9.2 Soft Porous Surfaces

- 9.2.1 The procedure for the hard porous surface may be used for certain soft porous surfaces, such as wood.
- 9.2.2 Samples should be collected at no more than 1/2-inch depth intervals using a metal chisel or sharp cutting knife. Thus, the initial surface sample should be collected from 0-0.5 inches. It is important to collect at least 10 grams for analysis.
- 9.2.3 For soft porous surfaces, such as caulking and rubber, a representative sample can be collected using a metal chisel or sharp cutting knife.

9.3 Multiple Depth Sampling

- 9.3.1 Multiple Depth Sampling may not be applicable to certain porous surfaces, such as caulking.
- 9.3.2 Collect the surface sample as outlined in Section 9.1 or 9.2.
- 9.3.3 Use the vacuum pump or cleaner to clean out the hole.
- 9.3.4 To collect multiple depths there are two options.

- 9.3.4.1 Option one: drill sequentially ½ inch increments with the 1 inch drill.
- 9.3.4.2 Option two: drill with the 1 inch bit and either make the hole larger or use a smaller bit to take the next 1/2 inch sample.
- 9.3.5 A stainless steel spoonula will make it easier to collect the sample from the bottom of the hole.

Note: The holes should be vacuumed thoroughly to minimize any cross-contamination between sample depths and the bits should be decontaminated between samples. (See Section 11.0.)

10.0 Sample Handling, Preservation, and Storage

- 10.1 Samples must be collected in glass containers for PCB analyses. In general, a 2-ounce sample container with a Teflon-lined cap (wide-mouth jars are preferred) will hold sufficient mass for most analyses. A 2-ounce jar can hold roughly 90 grams of sample.
- 10.2 Samples are to be shipped refrigerated and maintained at \leq 6°C until the time of extraction and analysis.
- 10.3 The suggested holding time for PCB samples is 14 days to extraction.

11.0 Decontamination

11.1 Assemble two decontamination buckets. The first bucket contains a detergent and potable water solution, and the second bucket is for rinsate. Place all used drill bits, hose for the vacuum cleaner, and utensils in the detergent and water bucket. Scrub each piece thoroughly using the scrub brush. Rinse each piece with water and hexane and place the rinsed pieces on clean paper towels. Individually dry and inspect each piece.

Notes: The powder does cling to the metal surfaces, so care should be taken during decontamination, especially with the twists and curves of the drill bits. Ensure that all equipment is dry prior to reuse.

- 11.2 Lightly contaminated drill bits and utensils may be wiped with a hexane soaked cloth and hexane rinsed for decontamination.
- All equipment, including the impact hammer, vacuum pump, and/or vacuum cleaner, should be wipe cleaned upon completion of the sampling and prior to leaving the site.

12.0 Data and Record Management

- 12.1 All data and information collection should follow a Field Data Management SOP or Quality Assurance Project Plan (QAPP).
- Follow the chain of custody procedures to release the samples to the laboratory. A copy is kept with the sampling records.
- 12.3 The field data is stored for at least 3 years.

13.0 Quality Control and Quality Assurance

- Representative samples are required. The sampler will evaluate the site specific conditions to assure the sample will be representative.
- 13.2 All sampling equipment must be decontaminated prior to use and between each discrete sample.
- 13.3 All field Quality Control (QC) sample requirements in a Sample and Analysis Plan (SAP) or QAPP must be followed. The SAP or QAPP may involve field blanks, equipment blanks, field duplicates and/or the collection of extra samples for the laboratory's quality control program.
- Field duplicates should be collected at a minimum frequency of 1 per 20 samples or 1 per non-related porous matrix, whichever is greater.

14.0 Waste Management and Pollution Prevention

14.1 During field sampling events there may be PCB and/or hazardous waste produced from the sample collection. The waste must be handled and disposed of in accordance with federal, state, and local regulations. The dust filter, and tubing if a vacuum pump is used, is disposed after each site investigation. This waste will be treated as PCB waste if the samples are positive for PCBs. It may be possible to manage or dispose of the waste produced at the site where the work was performed. If the site does not meet regulatory requirements for these types of activities, the waste must be transported to a facility permitted to manage and/or dispose of the waste.

15.0 References

- 1. <u>Guidance for the Preparation of Standard Operating Procedures for Quality-Related Operations</u>, QA/G-6, EPA/600/R-96/027, November 1995.
- 2. 40 CFR Part 761 Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution In Commerce, and Use Prohibitions
- 3. Sample Container and Holding Time: RCRA SW 846, Chapter 4, Table 4.1, Revision 4, February, 2007.

Example of Sample Label and Custody Seal

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CHIP, WIPE, AND SWEEP SAMPLING

SOP#: 2011 DATE: 11/16/94 REV. #: 0.0

1.0 SCOPE AND APPLICATION

This standard operating procedure (SOP) outlines the recommended protocol and equipment for collection of representative chip, wipe, and sweep samples to monitor potential surficial contamination.

This method of sampling is appropriate for surfaces contaminated with non-volatile species of analytes (i.e., PCB, PCDD, PCDF, metals, cyanide, etc.) Detection limits are analyte specific. Sample size should be determined based upon the detection limit desired and the amount of sample requested by the analytical laboratory. Typical sample area is one square foot. However, based upon sampling location, the sample size may need modification due to area configuration.

These are standard (i.e., typically applicable) operating procedures which may be varied or changed as required, dependent on site conditions, equipment limitations or limitations imposed by the procedure or other procedure limitations. In all instances, the ultimate procedures employed should be documented and associated with the final report.

Mention of trade names or commercial products does not constitute U.S. EPA endorsement or recommendation for use.

2.0 METHOD SUMMARY

Since surface situations vary widely, no universal sampling method can be recommended. Rather, the method and implements used must be tailored to suit a specific sampling site. The sampling location should be selected based upon the potential for contamination as a result of manufacturing processes or personnel practices.

Chip sampling is appropriate for porous surfaces and is generally accomplished with either a hammer and chisel, or an electric hammer. The sampling device should be laboratory cleaned and wrapped in clean, autoclaved aluminum foil until ready for use. To

collect the sample, a measured and marked off area is chipped both horizontally and vertically to an even depth of 1/8 inch. The sample is then transferred to the proper sample container.

Wipe samples are collected from smooth surfaces to indicate surficial contamination; a sample location is measured and marked off. While wearing a new pair of surgical gloves, a sterile gauze pad is opened, and soaked with solvent. The solvent used is dependent on the surface being sampled. This pad is then stroked firmly over the sample surface, first vertically, then horizontally, to ensure complete coverage. The pad is then transferred to the sample container.

Sweep sampling is an effective method for the collection of dust or residue on porous or non-porous surfaces. To collect such a sample, an appropriate area is measured off. Then, while wearing a new pair of disposable surgical gloves, a dedicated brush is used to sweep material into a dedicated dust pan. The sample is then transferred to the proper sample container.

Samples collected by all three methods are then sent to the laboratory for analysis.

3.0 SAMPLE PRESERVATION, CONTAINERS, HANDLING, AND STORAGE

Samples should be stored out of direct sunlight to reduce photodegredation, cooled to 4°C and shipped to the laboratory performing the analysis. Appropriately sized laboratory cleaned, glass sample jars should be used for sample collection. The amount of sample required will be determined in concert with the analytical laboratory.

4.0 INTERFERENCES AND POTENTIAL PROBLEMS

This method has few significant interferences or problems. Typical problems result from rough porous

surfaces which may be difficult to wipe, chip, or sweep.

5.0 EQUIPMENT

Equipment required for performing chip, wipe, or sweep sampling is as follows:

- C Lab clean sample containers of proper size and composition
- C Site logbook
- C Sample analysis request forms
- C Chain of Custody records
- Custody seals
- C Field data sheets
- C Sample labels
- C Disposable surgical gloves
- C Sterile wrapped gauze pad (3 in. x 3 in.)
- C Appropriate pesticide (HPLC) grade solvent
- C Medium sized laboratory cleaned paint brush
- C Medium sized laboratory cleaned chisel
- C Autoclaved aluminum foil
- C Camera
- C Hexane (pesticide/HPLC grade)
- C Iso-octane
- C Distilled/deionized water

6.0 REAGENTS

Reagents are not required for preservation of chip, wipe or sweep samples. However, reagents will be utilized for decontamination of sampling equipment.

7.0 PROCEDURES

7.1 Preparation

- 1. Determine the extent of the sampling effort, the sampling methods to be employed, and the types and amounts of equipment and supplies needed.
- 2. Obtain necessary sampling and monitoring equipment.
- 3. Decontaminate or preclean equipment, and ensure that it is in working order.
- 4. Prepare scheduling and coordinate with staff, clients, and regulatory agency, if appropriate.
- 5. Perform a general site survey prior to site entry in accordance with the site specific

Health and Safety Plan.

6. Mark all sampling locations. If required the proposed locations may be adjusted based on site access, property boundaries, and surface obstructions.

7.2 Chip Sample Collection

Sampling of porous surfaces is generally accomplished by using a chisel and hammer or electric hammer. The sampling device should be laboratory cleaned or field decontaminated as per the Sampling Equipment Decontamination SOP. It is then wrapped in cleaned, autoclaved aluminum foil. The sampler should remain in this wrapping until it is needed. Each sampling device should be used for only one sample.

- 1. Choose appropriate sampling points; measure off the designated area. Photo documentation is optional.
- 2. Record surface area to be chipped.
- 3. Don a new pair of disposable surgical gloves.
- 4. Open a laboratory-cleaned chisel or equivalent sampling device.
- 5. Chip the sample area horizontally, then vertically to an even depth of approximately 1/8 inch.
- 6. Place the sample in an appropriately prepared sample container with a Teflon lined cap.
- 7. Cap the sample container, attach the label and custody seal, and place in a plastic bag. Record all pertinent data in the site logbook and on field data sheets. Complete the sampling analysis request form and chain of custody record before taking the next sample.
- 8. Store samples out of direct sunlight and cool to 4EC.
- 9. Follow proper decontamination procedures then deliver sample(s) to the laboratory for analysis.

7.3 Wipe Sample Collection

Wipe sampling is accomplished by using a sterile

gauze pad, adding a solvent in which the contaminant is most soluble, then wiping a pre-determined, pre-measured area. The sample is packaged in an amber jar to prevent photodegradation and packed in coolers for shipment to the lab. Each gauze pad is used for only one wipe sample.

- 1. Choose appropriate sampling points; measure off the designated area. Photo documentation is optional.
- 2. Record surface area to be wiped.
- 3. Don a new pair of disposable surgical gloves.
- 4. Open new sterile package of gauze pad.
- 5. Soak the pad with solvent of choice.
- 6. Wipe the marked surface area using firm strokes. Wipe vertically, then horizontally to insure complete surface coverage.
- 7. Place the gauze pad in an appropriately prepared sample container with a Teflonlined cap.
- 8. Cap the sample container, attach the label and custody seal, and place in a plastic bag. Record all pertinent data in the site logbook and on field data sheets. Complete the sampling analysis request form and chain of custody record before taking the next sample.
- 9. Store samples out of direct sunlight and cool to 4°C.
- 10. Follow proper decontamination procedures, then deliver sample(s) to the laboratory for analysis.

7.4 Sweep Sample Collection

Sweep sampling is appropriate for bulk contamination. This procedure utilizes a dedicated, hand held sweeper brush to acquire a sample from a pre-measured area.

- 1. Choose appropriate sampling points; measure off the designated area. Photo documentation is optional.
- 2. Record the surface area to be swept.

- 3. Don new pair of disposable surgical gloves.
- 4. Sweep the measured area using a dedicated brush; collect the sample in a dedicated dust pan.
- Transfer sample from dust pan to sample container.
- 6. Cap the sample container, attach the label and custody seal, and place in a plastic bag. Record all pertinent data in the site log book and on field data sheets. Complete the sampling analysis request form and chain of custody record before taking the next sample.
- 7. Store samples out of direct sunlight and cool to 4FC.
- 8. Leave contaminated sampling device in the sample material, unless decontamination is practical.
- 9. Follow proper decontamination procedures, then deliver sample(s) to the laboratory for analysis.

8.0 CALCULATIONS

Results are usually provided in mg/g, μ g/g, mass per unit area, or other appropriate measurement. Calculations are typically done by the laboratory.

9.0 QUALITY ASSURANCE/ QUALITY CONTROL

The following general quality assurance procedures apply:

- 1. All data must be documented on standard chain of custody forms, field data sheets or within the site logbook.
- 2. All instrumentation must be operated in accordance with operating instructions as supplied by the manufacturer, unless otherwise specified in the work plan. Equipment calibration checkout and prior activities must occur to sampling/operation, and they must be documented.

The following specific quality assurance activities apply to wipe samples:

For wipe samples, a blank should be collected for each sampling event. This consists of a sterile gauze pad, wet with the appropriate solvent, and placed in a prepared sample container. The blank will help identify potential introduction of contaminants via the sampling methods, the pad, solvent or sample container. Spiked wipe samples can also be collected to better assess the data being generated. These are prepared by spiking a piece of foil of known area with a standard of the analyte of choice. The solvent containing the standard is allowed to evaporate, and the foil is wiped in a manner identical to the other wipe samples.

Specific quality assurance activities for chip and sweep samples should be determined on a site specific basis.

10.0 DATA VALIDATION

A review of the quality control samples will be conducted and the data utilized to qualify the environmental results.

11.0 HEALTH AND SAFETY

When working with potentially hazardous materials, follow EPA, OSHA and corporate health and safety procedures.

12.0 REFERENCES

U.S. EPA, A Compendium of Superfund Field Operation Methods. EPA/540/5-87/001.

NJDEP Field Sampling Procedures Manual, February, 1988.

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REGION I, EPA-NEW ENGLAND

DRAFT STANDARD OPERATING PROCEDURE FOR SAMPLING CONCRETE IN THE

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U.S. EPA-NEW ENGLAND Region I Quality Assurance Unit Staff Office of Environmental Measurement and Evaluation

Prepared by: Alan & Zeterson Date: 12/30/97

Quality Assurance Chemist

Reviewed by: Andrew Seliveau Date: 12/30/97

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Branch Chief

FIELD

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Region I, EPA New England

Standard Operating Procedure for Sampling Concrete in the Field

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Region I, EPA New England

Standard Operating Procedure for Sampling Concrete in the Field

1.0 Scope and Application

The following Standard Operating Procedure (SOP) describes a concrete sampling technique which uses an impact hammer drill to generate a uniform, finely ground, powder which is easily homogenized, extracted and analyzed. This procedure is primarily geared at providing enough sample for one or two different analyses at a time. That is, the time required to generate sufficient sample for a full sweet of analyses may be impractical. The concrete powder is suitable for all types of environmental analyses, with the exception of volatile compounds, and may be analyzed in the field or at a fixed laboratory. This procedure is applicable for the collection of samples from concrete floors, walls, and ceilings.

The impact hammer drill is far less labor intensive than previous techniques using coring devices, or hammers and chisels. It allows for easy selection of sample location and sample depth. Not only can the project planner control the depth to sample into the concrete, from surface samples (0 - ½ inch) down to a core of the entire slab, but the technique can also be modified to collect samples at discrete depths within the concrete slab.

Another issue with concrete sampling is the fact that the amount of time spent drilling translates into the weight of sample produced. Thus, to maximize sampling time, it is important to know the minimum amount of sample required for each analysis. To do this, the project planner should take the following steps: 1) Use the Data Quality Objective (DQO) process and familiarity with the site to develop the objectives of the sampling project and the depth(s) of sample to be collected. 2) Review the site history and any previous data collected to determined possible contaminants of concern. 3) Establish the action levels for those possible contaminants and determine the appropriate analytical methods (both field and/or fixed laboratory) to meet the DQOs of the project. 4) Based on the detection limits of these methods, determine the amount of sample required for each analysis and the total sample weight require for each sample location (including quality control samples).

As with any environmental data collection project, all aspects of a concrete sampling episode should be well thought out, prior to going out in the field, and thoroughly described in a Quality Assurance Project Plan (QAPP). The QAPP should clearly state the DQOs of the project and document a complete Quality Assurance/Quality Control program to reconcile the data generated with the established DQOs. For more information on these subjects, refer to EPA documents QA/R-5, <u>EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations</u>, and QA/G-4, <u>Guidance for the Data Quality Objective Process</u>.

2.0 Method Summary

A one-inch diameter carbide drill bit is used in a rotary impact hammer drill to generate a fine concrete powder suitable for analysis. The powder is placed in a sample container and homogenized for field or fixed laboratory analysis. The procedure can be used to sample a single depth into the concrete, or may be modified to sample the concrete at distinctly different depth zones. The modified depth sampling procedure is designed to minimize any cross contamination between the sampling zones. If different sampling depths are required, two different diameter drill bits and a vacuum sampling apparatus are employed.

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3.0 Health and Safety

Eye and hearing protection are required at all times during sample drilling. A small amount of dust is generated during the drilling process. Proper respiratory protection and/or a dust control system must be in place at all times during sampling.

4.0 Interferences and Potential Problems

Since this sampling technique produces a finely ground uniform powder, physical matrix effects from variations in the sample consistency (i.e., particle size, uniformity, homogeneity, and surface condition) are minimized. Matrix spike analysis of a sample is highly recommended to monitor for any matrix related interferences.

As stated in Section 1.0 above, this sampling procedure is not recommended for volatile organic compound (VOC) analysis. The combination of heat generated during drilling and the exposure of a large amount of surface area will greatly reduce VOC recovery. If low boiling point semi-volatile compounds (i.e., naphthalene) are being analyzed, then the drill speed should be reduced to minimize heat build-up.

5.0 Equipment and Supplies

5.1 Single Depth Concrete Sampling

- 5.1.1 Rotary impact hammer drill
- 5.1.2 1-inch diameter carbide drill bits
- 5.1.3 Stainless steel scoopulas
- 5.1.4 Stainless steel spoonulas (for collecting sample in deeper holes, >2-inches)
- 5.1.5 Rectangular aluminum pans (to catch concrete during wall and ceiling sampling)
- 5.1.6 Gasoline powered generator (if alternative power source is required)

5.2 Multiple Depth Sampling (in addition to all the above)

- 5.2.1 ½ inch diameter carbide drill bits
- 5.2.2 Vacuum/sample trap assembly (see Section 7.2 and Figure 1)
- 5.2.2.1 Vacuum pump
- 5.2.2.2 2-hole rubber stopper
- 5.2.2.3 Glass tubing (to fit stopper)
- 5.2.2.4 Large glass test tubes, or Erlenmeyer flasks, for sample trap (several are suggested)
- 5.2.2.5 Polyethylene tubing for trap inlet (Tygon tubing may be used for the trap outlet)
- 5.2.2.6 Pasture pipets
- 5.2.2.7 Pipe cleaners
- 5.2.2.8 In-line dust filter (glass fiber filter, or equivalent)

6.0 Sample Containers, Preservation, and Storage

Concrete samples must be collected in glass containers for organic analyses, and may be collected in either glass or plastic containers for inorganic analyses. In general, a 2-ounce sample container with

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Teflon-lined cap (wide-mouth jars are preferred) will hold sufficient volume for most analyses. A 2-ounce jar can hold roughly 90 grams sample. Note, samples which require duplicate and/or matrix spike/matrix spike duplicate analyses may require a larger sample container, or additional 2-ounce sample containers.

Organic samples are to be shipped on ice and maintained at 4° C ($\pm 2^{\circ}$ C) until the time of extraction and analysis. Inorganic samples may be shipped and stored at room temperature. Refer to 40 CFR Part 136 for guidelines on analysis holding times.

To maintain sample integrity, chain-of-custody procedures must be implemented at the time of sampling to 1) document all sample locations and associated field sample identification numbers, 2) document all quality control samples taken, including field duplicates, split samples for confirmatory analyses, and PE samples, and 3) document the transfer of field samples from field sampler to field chemist or fixed laboratory.

7.0 Procedure

7.1 Single Depth Concrete Sampling

Lock a 1-inch diameter carbide drill bit into the impact hammer drill and plug the drill into an appropriate power source. (A gasoline generator will be needed if electricity is not available.) For easy identification, sample locations may be pre-marked using a crayon or a non-contaminating spray paint. (Note, the actual drilling point must not be marked.) Depending on the appearance of the sample location, or the objectives of the sampling project, it may be desired to wipe the concrete surface with a clean dry cloth prior to drilling. All sampling decisions of this nature should be noted in the sampling logbook. Begin drilling in the designated location. Apply steady even pressure and let the drill do the work. Applying too much pressure will generate excessive heat and dull the drill bit prematurely. The drill will provide a finely ground concrete powder that can be easily collected, homogenized and analyzed. Having several decontaminated impact drill bits on hand will help expedite sampling when numerous sample locations are to be drilled.

Sample Collection

A ½-inch deep hole (using a 1-inch diameter drill bit) generates about 10 grams of concrete powder. Based on this and the action levels for the project, determine the sampling depth, and/or the number of sample holes to be composited, to generate sufficient sample volume for all of the required analyses. (Note, with the absorbency of concrete, a ½-inch deep hole can be considered a surface sample.)

A decontaminated stainless steel scoopula can be used to collect the sample. The powder can either be collected directly from the surface of the concrete and/or the concrete powder can be scraped back into the hole and the less rounded back edge of the scoopula can be used to collect the sample. For holes greater than 2-inches in depth, a stainless steel spoonula will make it easier to collect the sample from the bottom of the hole.

To ensure collection of a representative sample when multiple analyses are required, a concrete sample should always be collected and homogenized in a single container and then divided up into the individual containers for the various analyses or split samples. This is particularly important when sample holes are deep, or when several holes are drilled adjacent to each other to form a sample composite.

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Wall and Ceiling Sampling

A team of two samplers will be required for wall and ceiling sampling. The second person will be needed to hold a clean catch surface (i.e., an aluminum pan) below the drill to collect the falling powder. For wall samples, a scoopula, or spoonula, can be used to collect remaining concrete powder from within the hole. For ceiling holes, it may be necessary to drill the hole at an angle so the concrete powder can fall freely in the collection plan (and avoid falling on the drill). Another alternative might be to use the chuck-end of the drill bit and punch a hole through the center of the collection pan. The drill bit is then mounted through the pan and into the drill. Thus, the driller can be drilling straight up while the assistant steadies the pan to catch the falling dust. As a precaution, it may be advantageous to tape a piece of plastic around the drill, just below the chuck, to avoid dust contaminating the body of the drill and entering the mechanical vents. (Note, the plastic should deflect dust from the drill, but be loose enough underneath to allow for proper ventillation.)

7.2 Multiple Depth Concrete Sampling

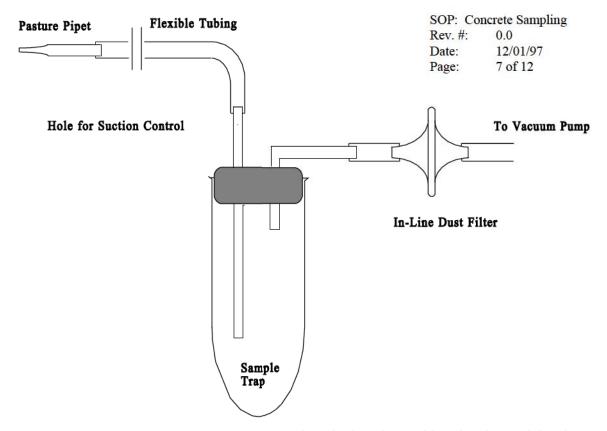
The above method for concrete sampling can also be used to collect samples from different depths within the concrete. To do this, two different sized drill bits (i.e., ½ inch and 1 inch) and a simple vacuum pump with a vacuum trap assembly is required (see Figure 1). First, the 1 inch drill bit is used to drill to the first level and the concrete sample is collected as described in Section 7.1. The vacuum pump is then turned on and the hole is cleaned out using the vacuum trap assembly. The drill bit is then changed to the ½ inch bit and the next depth is drilled out (the ½ inch bit is used to avoid contact with the sides of the first hole). A clean tube or flask is placed on the vacuum trap, and the sample from the second drilling is collected. To go further, the 1 inch drill is used to open up the hole to the second level, the hole is cleared, and then the ½ inch drill is used again to go to a third level, etc. Note, the holes and concrete surface should be vacuumed thoroughly to minimize any cross-contamination between sample depths.

Vacuum Trap Design and Clean-out

The trap presented in Figure 1 is a convenient and thorough way for collecting and removing concrete powder from drilled holes. The trap system is designed to allow for control of the suction from the vacuum pump and easy trap clean-out between samples. Note, by placing a hole in the inlet tube (see Figure 1), a finger on the hand holding the trap can be used to control the suction at the sampling tip. Thus, when this hole is left completely open, there will be no suction, and the sampler can have complete control over where and what to sample. To change-out between samples the following steps should be taken: 1) The pasture pipet and piece of polyethylene tubing at the sample inlet should be replaced with new materials, 2) the portion of the rubber stopper and glass tubing that was in the trap should be wiped down with a clean damp paper towel (wetted with deionized water) and then dried with a fresh paper towel, 3) a clean pipe cleaner should be drawn through the glass inlet tube to remove any concrete dust present, and 4) the glass tube or flask used to collect the sample should swapped out with a clean decontaminated sample trap. Having several clean tubes or flasks on hand will facilitate change-out between samples.

7.3 Decontamination Procedure

Necessary supplies for decontamination include: two small buckets, a scrub brush, potable water, deionized water, a squirt bottle for the deionized water, and paper towels. The first bucket contains a soap and potable water solution, and the second bucket contains just potable water. Place all used drill



bits and utensils in the soap and water bucket. Scrub each piece thoroughly using the scrub brush. Note, the concrete powder does cling to the metal surfaces, so care should be taken during this step, especially with the twists and curves of the drill bits. Next, rinse each piece in the potable water bucket, and follow with a deionized water rinse from the squirt bottle. Place the deionized water rinsed pieces on clean paper towels and individually dry and inspect each piece. Note, all pieces should be dry prior to reuse.

8.0 Field Documentation

All Site related documentation and reports generated from concrete sampling should be maintained in the central Site file. If personal logbooks are used, legible copies of all pertinent pages must be placed in the Site file.

8.1 Field Logbooks

All field documentation should be maintained in bound logbooks with numbered pages. If loose-leaf logsheets are used to document site activities, extra care should be taken in keep track of all logsheets. The original copy of all logsheets should be maintained in the central Site file. Note, all sample locations must be documented by tying in their location to a detailed site map, or by using two or more permanent landmarks. The following information should be documented in the field logbooks:

- Site name and location,
- EPA Site Manager,
- Name and affiliation of field samplers (EPA, Contractor company name, etc.),
- Sampling date,
- Sample locations and IDs,
- Sampling times and depths, and
- Other pertinent information or comments

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8.2 Sample Labeling and Chain-of-Custody

8.2.1 Sample Labels

Sample labels will be affixed to all sample containers. Labels must contain the following information:

- Project name,
- Sample number, and/or location
- Date and time of sampling,
- Analysis,
- Preservation, and
- Sampler's name.

8.2.2 <u>Chain-of-Custody</u>

All samples must be traced from collection, to shipment, to laboratory receipt and laboratory custody. The Chain-of-Custody (COC) Record is a multi-part form that is initiated as samples are acquired and accompanies a sample (or group of samples) as they are transferred from person to person. The COC form is signed by all individuals responsible for sampling, sample transport, and laboratory receipt. (Note, overnight deliver services, often used with sample transport, are exempt from having to sign the COC form. However, copies of all shipping invoices must be kept with the COC documentation.) One copy of the COC is retained by the field sampling crew, while the original (top, signed copy) and remaining carbonless copies are placed in a zip-lock bag and taped to the inside lid of the shipping cooler. If multiple coolers are required for a sample shipment to a single laboratory, the COC need only be sent with one of the coolers. The COC should state how many coolers are included with the shipment. All sample shipments to different laboratories require individual COC forms. The original COC form accompanies the samples until the project is complete, and is then kept in the permanent project file. A copy of the COC is also kept with the project manager, the laboratory manager, and attached to the data package.

8.2.3 <u>Custody Seal</u>

The Custody seal is an adhesive-backed label which is also part of the chain-of-custody process. The custody seal is used to prevent tampering with the samples after they have been collected in the field and sealed in coolers for transit to the laboratory. The Custody seals are signed and dated by a sampler and affixed across the opening edges of each cooler containing samples. Clear packing tape should be wrapped around the cooler, and over the Custody seal, to secure the cooler and avoid accidental tampering with the Custody seal.

9.0 Quality Assurance and Quality Control (QA/QC)

A solid QA/QC program is essential to establishing the quality of the data generated so that proper project decisions can be made. The following are key quality control elements which should be incorporated into a concrete sampling and analytical program.

9.1 Equipment Blanks

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An equipment blank should be performed on decontaminated drill bits and collection utensils at a frequency of 1 per 20 samples or 1 per day, whichever is greater. To prepare the equipment blank, place the decontaminated drill bit and utensils in a large clean stainless steel bowl. Pour sufficient deionized water into the bowl to fill all of the required sample containers. Next, stir the drill bit and utensils in the bowl with a clean utensil to thoroughly mix the blank. Finally, decant off the equipment blank into the sample containers. Note, a clean funnel may help to pour off the equipment blank into the containers.

9.2 Field Duplicates

Field duplicates are samples collected adjacent to each other (collocated) at the same sample location (not two aliquots of the same sample). Field duplicates not only help provide an indicator of overall precision, but measure the cumulative effects of both the field and analytical precision, and also measure the representativeness of the sample. Field duplicates must be prepared and analyzed at a frequency of 1 per 20 samples or 1 per non-related concrete matrix, whichever is greater. An example of a non-related concrete matrix might be the investigation of two different types of chemical spills.

Calculate the Relative Percent Difference (RPD) between the sample and its duplicate using Equation 1.

$$RPD = \frac{|S - D|}{\frac{(S + D)}{2}} \times 100$$

Equation 1 Where:

S = Original sample result D = Duplicate sample result

The following general guidelines have been established for field duplicate criteria:

- If both the original and field duplicate values are ≥ practical quantitation limit (PQL), then the control
 limit for RPD is ≤50%,
- If one or both values are < PQL, then do not assess the RPD.

If more rigorous field duplicate criteria are needed to achieve project DQOs, then that criteria should be documented in the project QAPP.

If the field duplicate criteria specified above are not met, then flag that target element with an "*" on the final report for both the original and field duplicate samples. Report both the original and field duplicate analyses; do not report the average. Field duplicate samples should should be indicated on the sample ID. For example, the sample ID can contain the the suffix "FD".

9.3 Laboratory Duplicates

Laboratory duplicates are two aliquots of the same sample that are prepared, homogenized and analyzed in the same manner. (Note, proper sample homogenization is critical in producing meaningful results.) The precision of the sample preparation and analytical methods is determined by performing a laboratory duplicate analysis. Laboratory duplicates can be prepared in the field and submitted as blind samples, or

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the laboratory can be requested to perform the laboratory duplicate analysis. In the case of laboratory prepared duplicates, the field sampling team must be sure to provide sufficient sample volume. Laboratory duplicates must be prepared and analyzed at a frequency of 1 per 20 samples or 1 per non-related concrete matrix, whichever is greater.

Calculate the RPD between the sample and its duplicate using Equation 1. The following general guidelines have been established for laboratory duplicate criteria:

- If both the original and laboratory duplicate values are ≥ PQL, then the control limit for RPD is ≤25%.
- If one or both values are < PQL, then do not assess the RPD.

If duplicate criteria are not met, then flag that target element with an "*" on the final report for both the original and duplicate samples. Report both the original and duplicate analyses; do not report the average.

9.4 Matrix Spike/Matrix Spike Duplicate Samples

Matrix spike/matrix spike duplicate samples (MS/MSDs) are two additional aliquots of a sample which are spiked with the appropriate compound(s) or analyte(s) of concern and then prepared and analyzed along with the original sample. (Note, proper sample homogenization, prior to spiking, is critical in producing meaningful results.) MS/MSDs help evaluate the effects of sample matrix on the analytical methods being used. The field sampling team must provide sufficient sample volume such that the field or fixed laboratory can prepare and analyze MS/MSDs at a frequency of 1 per 20 samples or 1 per non-related concrete matrix, whichever is greater.

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Calculate the recovery of each matrix spike compound or analyte using Equation 2.

$$MSR = \frac{SSR - SR}{SA} \times 100$$

Equation 2 Where,

MSR = Matrix Spike Recovery, SA = Spike Added SSR = Spiked Sample Result, SR = Sample Result

Calculate the relative percent difference (RPD) between the recoveries of each compound or analyte in the matrix spike and matrix spike duplicate using Equation 3.

$$RPD = \frac{|MSR - MSRD|}{\underline{(MSR + MSRD)}} \times 100$$

Equation 3 Where,

MSR = Matrix Spike Recovery

MSRD = Matrix Spike Duplicate Recovery

9.5 Performance Evaluation Samples

In accordance with the <u>EPA Region I Performance Evaluation Program Guidance</u>, performance evaluation (PE) samples should be submitted for each type of analysis to be performed in the field or by the fixed laboratory performing full protocol EPA methods. PE samples provide information on the quality of the individual data packages. PE samples are certified standard reference materials (SRMs) from a source other than that used to calibrate the instrument. If both field and fixed laboratories are being used to analyze samples, at least one solid PE sample should undergo both field analysis and confirmatory full protocol EPA method analysis to facilitate data comparability. A copy of the certified values for the SRM must be submitted with the final data packages to facilitate data evaluation.

9.6 Data Verification and Validation

All field data and supporting information (including chain-of-custody) that is collected during a concrete sampling episode should be verified daily, by a person other than that performing the work, to check for possible errors.

During the project planning process, a plan for data validation should be established for all data, both for field and fixed laboratories. All data must be validated to assure that it is of a quality suitable to make project decisions. For help in developing a data validation program refer to <u>Region I, EPA New England</u>, <u>Data Validation Functional Guidelines for Evaluating Environmental Analyses</u>.

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9.7 Audits

9.7.1 Internal Audits

As part of the Quality Assurance/Quality Control Program for any sampling project, a series of internal audit checks should be instituted to monitor and maintain the integrity of the sample collection process. Timely internal reviews will insure that proper sampling, decontamination, chain-of-custody and quality control procedures are being followed. Also, the internal audit review is there to monitor any corrective actions taken, and/or institute corrective actions that should have been taken and were not. All corrective actions taken must be documented in an appropriate logbook, and if any corrective actions impact the final data reported, then they must also be documented in the final report narrative. The results of all internal audits must be documented in a report, and copies of the report issued to the Project Manager and the Quality Assurance Manager. The original copy of any audit report must remain with the main project file and be available for review.

9.7.2 External Audits

The Agency reserves the right to perform periodic field audits to ensure compliance with this SOP.

10.0 References

- 1) Guidance for the Data Quality Objective Process, QA/G-4, EPA/600/R-96/055, September 1994.
- EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations, QA/R-5, Interim Final, October 1997.
- 3) <u>Guidance for the Preparation of Standard Operating Procedures for Quality-related Operations</u>, QA/G-6, EPA/600/R-96/027, November 1995.
- 4) <u>Region I, EPA-New England Data Validation Functional Guidelines for Evaluating Environmental Analyses</u>, July 1996.
- 5) EPA Region I Performance Evaluation Program Guidance, July 1996.
- 6) U.S. EPA Code of Federal Regulations, 40 CFR, Part 136, Appendix B, Revised as of July 1995.

Site Characterization and PCB Cleanup Plan Former Sullivan School 45 School Street, Berwick, Maine May 18, 2011

Appendix E - Site Characterization Laboratory Data, Laboratory QA/QC, Methods, and Chain of Custody



Report Date: 25-Apr-11 16:49



☐ Re-Issued Report □ Revised Report

Featuring HANIBAL TECHNOLOGY

Laboratory Report

Credere Associates, LLC 776 Main Street

Westbrook, ME 04092

Attn: Jedd Steinglass

Project: Sullivan School-Berwick, ME

Project #: 10001111

Laboratory ID	Client Sample ID	<u>Matrix</u>	Date Sampled	Date Received
SB27181-01	BM-21	Paint	12-Apr-11 09:16	16-Apr-11 11:55
SB27181-02	BM-22	Paint	12-Apr-11 09:21	16-Apr-11 11:55
SB27181-03	BM-23	Paint	12-Apr-11 09:30	16-Apr-11 11:55
SB27181-04	BM-24	Paint	12-Apr-11 09:39	16-Apr-11 11:55
SB27181-05	BM-25	Paint	12-Apr-11 09:50	16-Apr-11 11:55
SB27181-06	BM-26	Paint	12-Apr-11 09:55	16-Apr-11 11:55
SB27181-07	BM-27	Paint	12-Apr-11 10:07	16-Apr-11 11:55
SB27181-08	BM-28	Paint	12-Apr-11 10:15	16-Apr-11 11:55
SB27181-09	BM-29	Paint	12-Apr-11 10:35	16-Apr-11 11:55
SB27181-10	BM-30	Paint	12-Apr-11 10:47	16-Apr-11 11:55
SB27181-11	BM-31	Paint	12-Apr-11 11:05	16-Apr-11 11:55
SB27181-12	BM-32	Paint	12-Apr-11 11:10	16-Apr-11 11:55
SB27181-13	BM-33	Paint	12-Apr-11 11:25	16-Apr-11 11:55
SB27181-14	BM-34	Paint	12-Apr-11 11:30	16-Apr-11 11:55
SB27181-15	BM-35	Paint	12-Apr-11 11:40	16-Apr-11 11:55
SB27181-16	BM-36	Paint	12-Apr-11 11:47	16-Apr-11 11:55
SB27181-17	BM-37	Paint	12-Apr-11 12:13	16-Apr-11 11:55
SB27181-18	BM-38	Paint	12-Apr-11 13:00	16-Apr-11 11:55
SB27181-19	BM-39	Paint	12-Apr-11 13:20	16-Apr-11 11:55
SB27181-20	BM-40	Paint	12-Apr-11 13:24	16-Apr-11 11:55
SB27181-21	BM-41	Paint	12-Apr-11 14:57	16-Apr-11 11:55
SB27181-22	BM-42	Paint	12-Apr-11 14:59	16-Apr-11 11:55
SB27181-23	BM-43	Paint	12-Apr-11 15:00	16-Apr-11 11:55
SB27181-24	BM-44	Paint	12-Apr-11 15:06	16-Apr-11 11:55
SB27181-25	BM-45	Paint	12-Apr-11 15:15	16-Apr-11 11:55
SB27181-26	BM-46	Paint	12-Apr-11 15:35	16-Apr-11 11:55
SB27181-27	BM-47	Paint	12-Apr-11 15:45	16-Apr-11 11:55
SB27181-28	BM-48	Paint	12-Apr-11 16:20	16-Apr-11 11:55
SB27181-29	BM-49	Paint	12-Apr-11 16:40	16-Apr-11 11:55
SB27181-30	BM-50	Paint	12-Apr-11 17:02	16-Apr-11 11:55
SB27181-31	BM-51	Paint	12-Apr-11 14:58	16-Apr-11 11:55
SB27181-32	BM-52	Paint	12-Apr-11 15:05	16-Apr-11 11:55
SB27181-33	BM-53	Paint	12-Apr-11 15:20	16-Apr-11 11:55
SB27181-34	BM-54	Paint	12-Apr-11 15:50	16-Apr-11 11:55
SB27181-35	BM-55	Paint	12-Apr-11 16:10	16-Apr-11 11:55
SB27181-36	BM-56	Paint	12-Apr-11 16:15	16-Apr-11 11:55
SB27181-37	BM-57	Paint	12-Apr-11 16:21	16-Apr-11 11:55

SB27181-38	BM-58	Paint	12-Apr-11 16:31	16-Apr-11 11:55
SB27181-39	BM-59	Concrete	12-Apr-11 17:07	16-Apr-11 11:55
SB27181-40	BM-60	Concrete	12-Apr-11 17:17	16-Apr-11 11:55
SB27181-41	BM-61	Paint	12-Apr-11 17:25	16-Apr-11 11:55
SB27181-42	BM-62	Paint	12-Apr-11 17:27	16-Apr-11 11:55
SB27181-43	BM-63	Paint	12-Apr-11 17:40	16-Apr-11 11:55
SB27181-44	BM-64	Paint	12-Apr-11 17:50	16-Apr-11 11:55
SB27181-45	BM-65	Paint	12-Apr-11 18:05	16-Apr-11 11:55
SB27181-46	BM-66	Paint	12-Apr-11 18:13	16-Apr-11 11:55
SB27181-47	BM-67	Paint	12-Apr-11 18:16	16-Apr-11 11:55
SB27181-48	BM-68	Paint	12-Apr-11 18:26	16-Apr-11 11:55
SB27181-49	BM-69	Paint	12-Apr-11 18:35	16-Apr-11 11:55
SB27181-50	BM-70	Paint	12-Apr-11 18:45	16-Apr-11 11:55
SB27181-51	BM-71	Paint	12-Apr-11 17:20	16-Apr-11 11:55
SB27181-52	BM-72	Paint	12-Apr-11 17:23	16-Apr-11 11:55
SB27181-53	BM-73	Paint	12-Apr-11 19:26	16-Apr-11 11:55
SB27181-54	Dup-01	Paint	12-Apr-11 11:40	16-Apr-11 11:55
SB27181-55	Dup-02	Paint	12-Apr-11 14:58	16-Apr-11 11:55
SB27181-56	Dup-03	Paint	12-Apr-11 18:35	16-Apr-11 11:55

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.

All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110 Connecticut # PH-0777 Florida # E87600/E87936 Maine # MA138 New Hampshire # 2538 New Jersey # MA011/MA012 New York # 11393/11840 Pennsylvania # 68-04426/68-02924 Rhode Island # 98 USDA # S-51435



Authorized by:

Nicole Leja Laboratory Director

Vicole Leja

Spectrum Analytical holds certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes.

Please note that this report contains 72 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

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CASE NARRATIVE:

The samples were received 3.6 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of \pm 2.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

SW846 8082A

Spikes:

1106909-MS1 Source: SB27181-14

Multiple analyses indicate the percent recovery exceeds the Quality Control acceptance criteria due to a matrix effect.

Aroclor-1016 Aroclor-1016 [2C]

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

1106909-MSD1 Source: SB27181-14

Multiple analyses indicate the percent recovery exceeds the Quality Control acceptance criteria due to a matrix effect.

Aroclor-1016 Aroclor-1016 [2C]

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

1107089-MS1 Source: SB27181-40

The spike recovery for this QC sample is outside of established control limits due to sample matrix interference.

Aroclor-1260 Aroclor-1260 [2C]

1107089-MSD1 Source: SB27181-40

The spike recovery for this QC sample is outside of established control limits due to sample matrix interference.

Aroclor-1260 [2C]

Samples:

SB27181-02 *BM-22*

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27181-04 BM-24

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27181-05 BM-25

Samples:

SB27181-05 BM-25

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27181-06 BM-26

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27181-10 BM-30

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27181-11 BM-31

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27181-13 BM-33

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27181-14 BM-34

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27181-17 *BM-37*

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27181-18 BM-38

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27181-19 BM-39

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27181-20 *BM-40*

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

Samples:

SB27181-23 BM-43

The concentration indicated for this analyte is an estimated value. This value is considered an estimate (CLP E-flag).

Aroclor-1254

SB27181-23RE1 BM-43

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SB27181-26 BM-46

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27181-27 BM-47

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27181-28 BM-48

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27181-29 BM-49

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27181-30 BM-50

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27181-32 *BM-52*

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27181-34 BM-54

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27181-36 BM-56

The concentration indicated for this analyte is an estimated value. This value is considered an estimate (CLP E-flag).

Aroclor-1254

SB27181-36RE1 BM-56

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Samples:

SB27181-36RE1

BM-56

The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interference's.

4,4-DB-Octafluorobiphenyl (Sr)

4,4-DB-Octafluorobiphenyl (Sr) [2C]

Decachlorobiphenyl (Sr)

Decachlorobiphenyl (Sr) [2C]

SB27181-37

BM-57

The concentration indicated for this analyte is an estimated value. This value is considered an estimate (CLP E-flag).

Aroclor-1254

SB27181-37RE1

BM-57

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interference's.

4,4-DB-Octafluorobiphenyl (Sr)

4,4-DB-Octafluorobiphenyl (Sr) [2C]

Decachlorobiphenyl (Sr)

Decachlorobiphenyl (Sr) [2C]

SB27181-45

BM-65

The concentration indicated for this analyte is an estimated value. This value is considered an estimate (CLP E-flag).

Aroclor-1254

SB27181-45RE1

BM-65

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SB27181-46

BM-66

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27181-48

BM-68

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27181-49

BM-69

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27181-50

BM-70

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27181-51

BM-71

Samples:

SB27181-51 BM-71

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27181-52 *BM-72*

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27181-54 *Dup-01*

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27181-56 *Dup-03*

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

Sample Id BM-21 SB27181	dentification		<u>Client Project :</u> 10001111	<u>#</u>	<u>Matrix</u> Paint	-	ection Date 2-Apr-11 09			eceived Apr-11	
CAS No.	Analyte(s)	Result	Flag Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolat	tile Organic Compounds by GC										
	inated Biphenyls by SW846 8082 by method SW846 3540C	_									
12674-11-2	Aroclor-1016	BRL	μg/kg dry	101	1	SW846 8082A	19-Apr-11	23-Apr-11	IMR	1106909	X
11104-28-2	Aroclor-1221	BRL	μg/kg dry	101	1	"	"	"	"		Х
11141-16-5	Aroclor-1232	BRL	μg/kg dry	101	1		u	"	"	"	Χ
53469-21-9	Aroclor-1242	BRL	μg/kg dry	101	1	"	"	"	"	"	Х
12672-29-6	Aroclor-1248	BRL	μg/kg dry	101	1	"	"	"	"	"	Χ
11097-69-1	Aroclor-1254	BRL	μg/kg dry	101	1	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL	μg/kg dry	101	1	"	"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL	μg/kg dry	101	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL	μg/kg dry	101	1		"		"	"	Χ
Surrogate	recoveries:										
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	84		30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	113		30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	132		30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	119		30-150 %		"	"	"	"	"	
General C	Chemistry Parameters										

96.9

% Solids

SM2540 G Mod. 21-Apr-11 21-Apr-11

Sample Id BM-22 SB27181-	dentification -02			nt Project# 0001111		<u>Matrix</u> Paint		ection Date -Apr-11 09			eceived Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	hated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	101	1	SW846 8082A	19-Apr-11	20-Apr-11	IMR	1106909	Χ
11104-28-2	Aroclor-1221	BRL		μg/kg dry	101	1	"	"	"	"		Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	101	1	"	"	u	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	101	1	"	"	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	101	1	"	"	"	"	"	Х
11097-69-1	Aroclor-1254	BRL		μg/kg dry	101	1	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	101	1	"	"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	101	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	101	1	"	"	"	"	"	Х
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	123			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	389	S02		30-150 %		n .	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	131			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	114			30-150 %		"	"	"	"		
General C	hemistry Parameters											

94.5

% Solids

SM2540 G Mod. 21-Apr-11 21-Apr-11

Sample Id BM-23 SB27181-	-03			<u>Project #</u> 01111		<u>Matrix</u> Paint	-	ection Date -Apr-11 09			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	104	1	SW846 8082A	19-Apr-11	20-Apr-11	IMR	1106909	Χ
11104-28-2	Aroclor-1221	BRL		μg/kg dry	104	1	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	104	1	"	"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	104	1	"	"	"	"		Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	104	1		"	"	"	"	Х
11097-69-1	Aroclor-1254	5,160		μg/kg dry	104	1		"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	104	1		"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	104	1		"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	104	1	"	"	"	"	"	Χ
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	91			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	61			30-150 %		u	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	97			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	99			30-150 %		"	"	"	"	"	
General C	hemistry Parameters											

% Solids

94.5

SM2540 G Mod. 21-Apr-11 21-Apr-11

Sample Id BM-24 SB27181-	entification 04			<u>t Project #</u> 001111		<u>Matrix</u> Paint	<u></u>	ection Date -Apr-11 09			ceived Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	97.6	1	SW846 8082A	19-Apr-11	20-Apr-11	IMR	1106909	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	97.6	1	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	97.6	1	"	"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	97.6	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	97.6	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	7,840		μg/kg dry	97.6	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	BRL		μg/kg dry	97.6	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	97.6	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	97.6	1	u	"	"	"	"	Χ
Surrogate r	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	95			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	19000	S02		30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	121			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	101			30-150 %		"	"	"	"	"	
General Cl	hemistry Parameters											
	% Solids	95.0		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107163	

Sample Io BM-25 SB27181-	entification -05			<u>t Project #</u> 001111		<u>Matrix</u> Paint		ection Date -Apr-11 09			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	90.7	1	SW846 8082A	19-Apr-11	20-Apr-11	IMR	1106909	Х
11104-28-2	Aroclor-1221	BRL		μg/kg dry	90.7	1	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	90.7	1	"	"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	90.7	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	90.7	1	"	"	"	"	"	Х
11097-69-1	Aroclor-1254	12,500		μg/kg dry	90.7	1	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	90.7	1	"	"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	90.7	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	90.7	1	п	"	"	"	"	Χ
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	86			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	273	S02		30-150 %		II	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	97			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	92			30-150 %		"	"	"	"	"	
General C	hemistry Parameters											
	% Solids	97.5		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107163	

Sample Id BM-26 SB27181-	entification 06			<u>t Project #</u> 001111		<u>Matrix</u> Paint		ection Date -Apr-11 09			ceived Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	102	1	SW846 8082A	19-Apr-11	20-Apr-11	IMR	1106909	Х
11104-28-2	Aroclor-1221	BRL		μg/kg dry	102	1	"	"	u u	"	"	X
11141-16-5	Aroclor-1232	BRL		μg/kg dry	102	1	"	"	u u	"	"	X
53469-21-9	Aroclor-1242	BRL		μg/kg dry	102	1	"	"	"	"	"	Χ
12672-29-6	Aroclor-1248	BRL		μg/kg dry	102	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	7,680		μg/kg dry	102	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	BRL		μg/kg dry	102	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	102	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	102	1	п	II .	· ·	u	u	Χ
Surrogate r	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	94			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	221	S02		30-150 %		u .	u	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	98			30-150 %		"	"	"	ıı	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	80			30-150 %		"	"	"	"	"	
General Cl	hemistry Parameters											
	% Solids	89.7		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107163	

Sample Id BM-27 SB27181-	entification 07			t Project # 001111		<u>Matrix</u> Paint		ection Date -Apr-11 10			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	103	1	SW846 8082A	19-Apr-11	20-Apr-11	IMR	1106909	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	103	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	BRL		μg/kg dry	103	1	"	"	"	"	"	X
53469-21-9	Aroclor-1242	BRL		μg/kg dry	103	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	103	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	5,760		μg/kg dry	103	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	BRL		μg/kg dry	103	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	103	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	103	1	"	"	"	"	"	Χ
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	83			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	80			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	103			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	82			30-150 %			"	"	"	"	
General C	hemistry Parameters											
	% Solids	94.6		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107163	

Sample Io BM-28 SB27181-	dentification -08			<u>t Project #</u> 001111		<u>Matrix</u> Paint		ection Date -Apr-11 10			eceived Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	105	1	SW846 8082A	19-Apr-11	20-Apr-11	IMR	1106909	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	105	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	BRL		μg/kg dry	105	1	"	"	"	"	"	X
53469-21-9	Aroclor-1242	BRL		μg/kg dry	105	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	105	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	5,570		μg/kg dry	105	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	482		μg/kg dry	105	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	105	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	105	1	11	"	"	"	"	Χ
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	91			30-150 %		"	u u	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	107			30-150 %		п	u	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	107			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	102			30-150 %		"	"	"	"	"	
General C	hemistry Parameters											
	% Solids	92.9		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107163	

Sample Id BM-29 SB27181-	lentification 09			<u>t Project #</u> 001111		<u>Matrix</u> Paint		ection Date -Apr-11 10			eceived Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	107	1	SW846 8082A	19-Apr-11	20-Apr-11	IMR	1106909	Х
11104-28-2	Aroclor-1221	BRL		μg/kg dry	107	1	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	107	1	"	"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	107	1	"	"	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	107	1	"	"	"	"	"	Х
11097-69-1	Aroclor-1254	8,120		μg/kg dry	107	1	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	927		μg/kg dry	107	1	"	"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	107	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	107	1	11	"	"	"	"	Χ
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	84			30-150 %		"	u u	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	94			30-150 %		п	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	114			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	95			30-150 %		"	"	"	"	"	
General C	hemistry Parameters											
	% Solids	92.8		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107163	

Sample Id BM-30 SB27181-	entification 10			<u>t Project #</u> 001111		<u>Matrix</u> Paint	·	ection Date -Apr-11 10			ceived Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	96.9	1	SW846 8082A	19-Apr-11	20-Apr-11	IMR	1106909	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	96.9	1	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	96.9	1	"	"	"	"	"	Χ
53469-21-9	Aroclor-1242	BRL		μg/kg dry	96.9	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	96.9	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	BRL		μg/kg dry	96.9	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	BRL		μg/kg dry	96.9	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	96.9	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	96.9	1	п	"	"	"	"	Χ
Surrogate r	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	87			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	21900	S02		30-150 %		"	u	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	139			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	132			30-150 %		"	"	"	"	"	
General Cl	hemistry Parameters											
	% Solids	95.3		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107163	

Sample Id BM-31 SB27181-	lentification			<u>t Project #</u> 001111		<u>Matrix</u> Paint		ection Date -Apr-11 11			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	93.1	1	SW846 8082A	19-Apr-11	20-Apr-11	IMR	1106909	Х
11104-28-2	Aroclor-1221	BRL		μg/kg dry	93.1	1	"	u u	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	93.1	1	"	u u	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	93.1	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	93.1	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	BRL		μg/kg dry	93.1	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	BRL		μg/kg dry	93.1	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	93.1	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	93.1	1	"	"		"	"	Χ
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	70			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	10700	S02		30-150 %		п	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	94			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	50			30-150 %		"	"	"	"	"	
General C	hemistry Parameters											
	% Solids	88.4		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107163	

Sample Id BM-32 SB27181-	lentification -12			<u>Project #</u> 001111		<u>Matrix</u> Paint	-	ection Date -Apr-11 11			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	99.1	1	SW846 8082A	19-Apr-11	20-Apr-11	IMR	1106909	Χ
11104-28-2	Aroclor-1221	BRL		μg/kg dry	99.1	1	"	"	"	"	"	Χ
11141-16-5	Aroclor-1232	BRL		μg/kg dry	99.1	1	"	"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	99.1	1	"	n n	"	"		Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	99.1	1		"	"	"	"	Х
11097-69-1	Aroclor-1254	4,360		μg/kg dry	99.1	1		"	"	"		Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	99.1	1	"	"	"	"		Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	99.1	1	"	"	"	"		Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	99.1	1	"	"	"	"	"	Χ
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	90			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	114			30-150 %		п	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	92			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	100			30-150 %		"	"	"	"	"	
General C	hemistry Parameters											

95.5

% Solids

SM2540 G Mod. 21-Apr-11 21-Apr-11

Sample Id BM-33 SB27181-	-13			nt Project # 0001111		<u>Matrix</u> Paint		ection Date -Apr-11 11			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	94.3	1	SW846 8082A	19-Apr-11	23-Apr-11	IMR	1106909	Χ
11104-28-2	Aroclor-1221	BRL		μg/kg dry	94.3	1	"	"	"	"	"	Χ
11141-16-5	Aroclor-1232	BRL		μg/kg dry	94.3	1	"	"	"	"	"	Χ
53469-21-9	Aroclor-1242	BRL		μg/kg dry	94.3	1	"	n n	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	94.3	1		"	"	"	"	Х
11097-69-1	Aroclor-1254	5,540		μg/kg dry	94.3	1	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	94.3	1	"	"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	94.3	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	94.3	1	"	"	"	"	"	Χ
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	74			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	2480	S02		30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	117			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	95			30-150 %		n n	"	"	"	"	
General C	hemistry Parameters											

% Solids

97.7

SM2540 G Mod. 21-Apr-11 21-Apr-11

Sample Id BM-34 SB27181-	entification 14			<u>t Project #</u> 001111		<u>Matrix</u> Paint	<u></u>	ection Date -Apr-11 11			ceived Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	98.2	1	SW846 8082A	19-Apr-11	20-Apr-11	IMR	1106909	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	98.2	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	BRL		μg/kg dry	98.2	1	"	"	"	"	"	X
53469-21-9	Aroclor-1242	BRL		μg/kg dry	98.2	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	98.2	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	7,010		μg/kg dry	98.2	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	BRL		μg/kg dry	98.2	1	"	"	"	"	"	Χ
37324-23-5	Aroclor-1262	BRL		μg/kg dry	98.2	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	98.2	1	II .	"	u	"	"	Χ
Surrogate r	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	73			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	15400	S02		30-150 %		u .	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	90			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	71			30-150 %		"	"	"	"	"	
General Cl	hemistry Parameters											
	% Solids	97.8		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107163	

Sample Id BM-35 SB27181-	lentification -15		Client Proj 100011			<u>Matrix</u> Paint		ection Date -Apr-11 11			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag U	nits	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolat	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL	μg/k	g dry	97.0	1	SW846 8082A	19-Apr-11	20-Apr-11	IMR	1106909	Х
11104-28-2	Aroclor-1221	BRL	μg/k	g dry	97.0	1	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL	μg/k	g dry	97.0	1	"	"	"	"		Х
53469-21-9	Aroclor-1242	BRL	μg/k	g dry	97.0	1	"	"	"	"	"	Х
12672-29-6	Aroclor-1248	BRL	μg/k	g dry	97.0	1	"	"	"	"	"	Х
11097-69-1	Aroclor-1254	2,920	μg/k	g dry	97.0	1	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL	μg/k	g dry	97.0	1	"	"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL	μg/k	g dry	97.0	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL	μg/k	g dry	97.0	1	"	"	"	"	"	Χ
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	83		30	0-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	80		30	0-150 %		n .	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	82		30	0-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	68		30	0-150 %		"	"	"	"	"	
General C	hemistry Parameters											

94.1

% Solids

SM2540 G Mod. 21-Apr-11 21-Apr-11

Sample Id BM-36 SB27181-	lentification			<u>t Project #</u> 001111		<u>Matrix</u> Paint		ection Date -Apr-11 11			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	99.9	1	SW846 8082A	19-Apr-11	20-Apr-11	IMR	1106909	Х
11104-28-2	Aroclor-1221	BRL		μg/kg dry	99.9	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	BRL		μg/kg dry	99.9	1	"	"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	99.9	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	99.9	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	4,850		μg/kg dry	99.9	1	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	438		μg/kg dry	99.9	1	"	"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	99.9	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	99.9	1	11	"	"	"	"	Χ
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	84			30-150 %		"	u u	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	109			30-150 %		п	u	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	111			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	116			30-150 %		"	"	"	"	"	
General C	hemistry Parameters											
	% Solids	96.2		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107163	

Sample Id BM-37 SB27181-	lentification			nt Project # 0001111		<u>Matrix</u> Paint	-	ection Date -Apr-11 12			eceived Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	97.2	1	SW846 8082A	19-Apr-11	20-Apr-11	IMR	1106909	Х
11104-28-2	Aroclor-1221	BRL		μg/kg dry	97.2	1	"	"	"	"		Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	97.2	1	"	"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	97.2	1		"	"	"	"	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	97.2	1		"	"	"	"	X
11097-69-1	Aroclor-1254	6,780		μg/kg dry	97.2	1		"	"	"	"	Х
11096-82-5	Aroclor-1260	197		μg/kg dry	97.2	1		"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	97.2	1		"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	97.2	1	u u	"	"	"	"	Х
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	86			30-150 %		"	"	"		"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	202	S02		30-150 %		п	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	78			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	91			30-150 %		"	"	"	"	"	
General C	hemistry Parameters											

% Solids

97.7

SM2540 G Mod. 21-Apr-11 21-Apr-11

Sample Id BM-38 SB27181-	lentification 18			<u>t Project #</u> 001111		<u>Matrix</u> Paint		ection Date -Apr-11 13			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	83.3	1	SW846 8082A	19-Apr-11	20-Apr-11	IMR	1106909	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	83.3	1	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	83.3	1	"	"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	83.3	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	83.3	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	4,890		μg/kg dry	83.3	1	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	357		μg/kg dry	83.3	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	83.3	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	83.3	1	11	"	"	"	"	Χ
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	81			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	633	S02		30-150 %		n	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	94			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	95			30-150 %		"	"	"	"	"	
General C	hemistry Parameters											
	% Solids	98.9		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107163	

Sample Io BM-39 SB27181-	lentification			nt Project # 0001111		<u>Matrix</u> Paint		ection Date Apr-11 13			ceived Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	94.4	1	SW846 8082A	21-Apr-11	22-Apr-11	IMR	1107125	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	94.4	1	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	94.4	1	"	"	"	"	"	Χ
53469-21-9	Aroclor-1242	BRL		μg/kg dry	94.4	1	"	"	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	94.4	1	"	"	"	"	"	Х
11097-69-1	Aroclor-1254	3,950		μg/kg dry	94.4	1	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	143		μg/kg dry	94.4	1	"	"	"	"	"	Χ
37324-23-5	Aroclor-1262	BRL		μg/kg dry	94.4	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	94.4	1	"	"	"	"	"	Χ
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	94			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	287	S02		30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	108			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	101			30-150 %		"	"	"	"		
General C	hemistry Parameters											

% Solids

98.4

SM2540 G Mod. 21-Apr-11 21-Apr-11

Sample Id BM-40 SB27181-	dentification -20			nt Project # 001111		<u>Matrix</u> Paint		ection Date -Apr-11 13			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
Polychlori	nated Biphenyls by SW846 8082											
Prepared	by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	100	1	SW846 8082A	21-Apr-11	22-Apr-11	IMR	1107125	Χ
11104-28-2	Aroclor-1221	BRL		μg/kg dry	100	1	"	"	"	"	"	Χ
11141-16-5	Aroclor-1232	BRL		μg/kg dry	100	1	"	"	"	"	"	Χ
53469-21-9	Aroclor-1242	BRL		μg/kg dry	100	1	"	"	"	"	"	Χ
12672-29-6	Aroclor-1248	BRL		μg/kg dry	100	1	"	"	"	"	"	Х
11097-69-1	Aroclor-1254	2,050		μg/kg dry	100	1	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	1,080		μg/kg dry	100	1	"	"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	100	1	"	"	"	"	"	X
11100-14-4	Aroclor-1268	BRL		μg/kg dry	100	1	"	"	"	"	"	Χ
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	99			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	210	S02		30-150 %		u	n	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	132			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	117			30-150 %		n n	"	"	"	"	
General C	hemistry Parameters											
	% Solids	97.7		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107163	

Sample Id BM-41 SB27181-	entification 21			<u>t Project #</u> 001111		<u>Matrix</u> Paint	·	ection Date -Apr-11 14			ceived Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	91.8	1	SW846 8082A	21-Apr-11	22-Apr-11	IMR	1107125	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	91.8	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	BRL		μg/kg dry	91.8	1	"	"	"	"	"	X
53469-21-9	Aroclor-1242	BRL		μg/kg dry	91.8	1	"	"	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	91.8	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	2,460		μg/kg dry	91.8	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	316		μg/kg dry	91.8	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	91.8	1	"	"	"	"	"	X
11100-14-4	Aroclor-1268	BRL		μg/kg dry	91.8	1	· ·	"	"	"	"	Χ
Surrogate r	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	84			30-150 %		"	u u	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	95			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	104			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	109			30-150 %		"	"	"	"	"	
General Cl	hemistry Parameters											
	% Solids	94.1		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107165	

Sample Id BM-42 SB27181-	elentification -22			<u>t Project #</u> 001111		<u>Matrix</u> Paint		ection Date Apr-11 14			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	99.1	1	SW846 8082A	21-Apr-11	22-Apr-11	IMR	1107125	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	99.1	1	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	99.1	1	"	"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	99.1	1		"	"	"		Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	99.1	1	"	"	"	"		Х
11097-69-1	Aroclor-1254	4,000		μg/kg dry	99.1	1	"	u u	"	"	"	Х
11096-82-5	Aroclor-1260	303		μg/kg dry	99.1	1	"	"	"	"		Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	99.1	1	"	"	"	"		Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	99.1	1	"	"	"	"	"	Χ
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	94			30-150 %		"	"	"		"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	108			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	135			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	93			30-150 %		"	"	"	"	"	
General C	hemistry Parameters											

% Solids

95.1

SM2540 G Mod. 21-Apr-11 21-Apr-11

Sample Id BM-43 SB27181-	lentification 23			<u>nt Project #</u> 0001111		<u>Matrix</u> Paint		ection Date -Apr-11 15			ceived Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cer
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082											
	by method SW846 3540C											
	Aroclor-1016	BRL		μg/kg dry	95.2	1	SW846 8082A	21-Apr-11	22-Apr-11	IMR	1107125	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	95.2	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	BRL		μg/kg dry	95.2	1	"	"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	95.2	1	"	"	u	"		Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	95.2	1	"	"	"	"	"	Х
11097-69-1	Aroclor-1254	38,100	E	μg/kg dry	95.2	1	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	95.2	1	"	"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	95.2	1	"	"	u	"		Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	95.2	1	"	"	"	"	"	Х
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	85			30-150 %			n n	"	"	"	
10386-84-2		109			30-150 %			"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	93			30-150 %		"	u u	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	82			30-150 %		u u	"	u	"	"	
	sis of Polychlorinated Biphenyls b by method SW846 3540C	y SW846 8082	GS1									
12674-11-2	Aroclor-1016	BRL		μg/kg dry	952	10	SW846 8082A	21-Apr-11	25-Apr-11	IMR	1107125	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	952	10		"	u	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	952	10	"	u u	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	952	10	"	u u	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	952	10	"	u u	"	"	"	Х
11097-69-1	Aroclor-1254	39,200		μg/kg dry	952	10	"	u u	"	"	"	X
11096-82-5	Aroclor-1260	BRL		μg/kg dry	952	10	"	u u	"	"	"	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	952	10	"	"	"	"	"	X
11100-14-4	Aroclor-1268	BRL		μg/kg dry	952	10	u u	"	u	"	"	Х
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	95			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	115			30-150 %			"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	105			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	70			30-150 %		"	"	"	"	"	
General C	hemistry Parameters											
	·											

% Solids

97.2

SM2540 G Mod. 21-Apr-11 21-Apr-11 VK 1107165

Sample Id BM-44 SB27181-	entification 24			<u>t Project #</u> 001111		<u>Matrix</u> Paint	·	ection Date -Apr-11 15			ceived Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	99.3	1	SW846 8082A	21-Apr-11	22-Apr-11	IMR	1107125	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	99.3	1	"	u u	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	99.3	1	"	u u	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	99.3	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	99.3	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	1,380		μg/kg dry	99.3	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	132		μg/kg dry	99.3	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	99.3	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	99.3	1	"	"	"	"	u	Χ
Surrogate r	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	96			30-150 %		"	"	u u	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	110			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	137			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	93			30-150 %		"	"	"	"	"	
General Cl	hemistry Parameters											
	% Solids	98.2		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107165	

Sample Id BM-45 SB27181-	entification 25			<u>tt Project #</u> 001111		<u>Matrix</u> Paint		ection Date -Apr-11 15			ceived Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	101	1	SW846 8082A	21-Apr-11	22-Apr-11	IMR	1107125	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	101	1	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	101	1	"	"	"	"	"	Χ
53469-21-9	Aroclor-1242	BRL		μg/kg dry	101	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	101	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	540		μg/kg dry	101	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	BRL		μg/kg dry	101	1	"	"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	101	1	"	"	"	"		Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	101	1	"	"	"	"	"	Χ
Surrogate r	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	95			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	148			30-150 %		n .	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	125			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	93			30-150 %		"	"	"	"	"	
General Cl	hemistry Parameters											
	% Solids	92.5		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107165	

Sample Id BM-46 SB27181-	lentification 26		· · · · · · · · · · · · · · · · · · ·	<u>at Project #</u>		<u>Matrix</u> Paint	-	ection Date -Apr-11 15			eceived Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	94.0	1	SW846 8082A	21-Apr-11	22-Apr-11	IMR	1107125	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	94.0	1	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	94.0	1	"	"	"	"	"	X
53469-21-9	Aroclor-1242	BRL		μg/kg dry	94.0	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	94.0	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	868		μg/kg dry	94.0	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	BRL		μg/kg dry	94.0	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	94.0	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	94.0	1	11	"	"	"	u	Χ
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	84			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	889	S02		30-150 %		n .	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	91			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	85			30-150 %		"	"	"	"	"	
General C	hemistry Parameters											
	% Solids	99.8		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107165	

Sample Id BM-47 SB27181-	dentification -27			t Project # 001111		<u>Matrix</u> Paint		ection Date -Apr-11 15			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	hated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	100	1	SW846 8082A	21-Apr-11	22-Apr-11	IMR	1107125	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	100	1	"	u u	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	100	1	"	u u	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	100	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	100	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	4,490		μg/kg dry	100	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	596		μg/kg dry	100	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	100	1	"	"	"	"		Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	100	1	п	"	"	"	"	Χ
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	97			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	770	S02		30-150 %		u .	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	113			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	95			30-150 %		"	"	"	"	"	
General C	hemistry Parameters											
	% Solids	95.4		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107165	

Sample Id BM-48 SB27181-	entification 28			<u>t Project #</u> 001111		<u>Matrix</u> Paint	-	ection Date -Apr-11 16			ceived Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolatil	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	95.8	1	SW846 8082A	21-Apr-11	22-Apr-11	IMR	1107125	Х
11104-28-2	Aroclor-1221	BRL		μg/kg dry	95.8	1	"	"	"	"	"	Χ
11141-16-5	Aroclor-1232	BRL		μg/kg dry	95.8	1	"	"	"	"	"	Χ
53469-21-9	Aroclor-1242	BRL		μg/kg dry	95.8	1	"	"	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	95.8	1	"	"	"	"	"	Х
11097-69-1	Aroclor-1254	2,910		μg/kg dry	95.8	1	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	413		μg/kg dry	95.8	1	"	"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	95.8	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	95.8	1	п	II .	"	"	u	Χ
Surrogate r	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	84			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	1390	S02		30-150 %		u .	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	106			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	105			30-150 %		"	"	"	"	"	
General Cl	hemistry Parameters											
	% Solids	99.2		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107165	

Sample Id BM-49 SB27181-	lentification -29			nt Project # 0001111		<u>Matrix</u> Paint		ection Date -Apr-11 16			eceived Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	lle Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	83.2	1	SW846 8082A	21-Apr-11	22-Apr-11	IMR	1107125	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	83.2	1	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	83.2	1	"	"	"	"	"	Χ
53469-21-9	Aroclor-1242	BRL		μg/kg dry	83.2	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	83.2	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	3,810		μg/kg dry	83.2	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	469		μg/kg dry	83.2	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	83.2	1	"	"	"	"	"	X
11100-14-4	Aroclor-1268	BRL		μg/kg dry	83.2	1	"	"	"	"	"	Χ
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	74			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	4410	S02		30-150 %		"	u	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	107			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	121			30-150 %		"	"	"	"	"	
General C	hemistry Parameters											
	% Solids	99.0		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107165	

Sample Io BM-50 SB27181-	dentification -30			at Project # 001111		<u>Matrix</u> Paint		ection Date -Apr-11 17			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	73.5	1	SW846 8082A	21-Apr-11	22-Apr-11	IMR	1107125	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	73.5	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	BRL		μg/kg dry	73.5	1	"	"	"	"	"	X
53469-21-9	Aroclor-1242	BRL		μg/kg dry	73.5	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	73.5	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	2,310		μg/kg dry	73.5	1	"	"	"	"	"	Χ
11096-82-5	Aroclor-1260	669		μg/kg dry	73.5	1	"	"	"	"		Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	73.5	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	73.5	1	"	"	"	"	"	Χ
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	103			30-150 %		"	u u	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	16100	S02		30-150 %		п	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	106			30-150 %		"	"	"	"		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	126			30-150 %		"	"	"	"	"	
General C	hemistry Parameters											
	% Solids	99.7		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107165	

Sample Id BM-51 SB27181	dentification -31			nt Project #		<u>Matrix</u> Paint		ection Date -Apr-11 14			ceived Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolat	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	88.4	1	SW846 8082A	21-Apr-11	22-Apr-11	IMR	1107125	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	88.4	1	"	"	"	"		Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	88.4	1	"	"	"	"		X
53469-21-9	Aroclor-1242	BRL		μg/kg dry	88.4	1	"	u u	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	88.4	1		"	"	"	"	Х
11097-69-1	Aroclor-1254	14,300		μg/kg dry	88.4	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	1,020		μg/kg dry	88.4	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	88.4	1		"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	88.4	1	"	"	"	"	"	Χ
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	83			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	124			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	103			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	121			30-150 %		"	"	"	"	"	
General C	hemistry Parameters											

96.3

% Solids

SM2540 G Mod. 21-Apr-11 21-Apr-11

Sample Id BM-52 SB27181-	dentification 32			nt Project # 0001111		<u>Matrix</u> Paint		ection Date -Apr-11 15			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	85.7	1	SW846 8082A	21-Apr-11	23-Apr-11	IMR	1107125	Χ
11104-28-2	Aroclor-1221	BRL		μg/kg dry	85.7	1	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	85.7	1	"	"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	85.7	1	"	u u	"	"		Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	85.7	1	"	u u	"	"		Х
11097-69-1	Aroclor-1254	7,720		μg/kg dry	85.7	1	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	559		μg/kg dry	85.7	1	"	"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	85.7	1	"	"	"	"		Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	85.7	1	"	"	"	"	"	Χ
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	102			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	13500	S02		30-150 %		u	u	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	124			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	89			30-150 %		"	"	"	"	"	
General C	hemistry Parameters											

% Solids

96.7

SM2540 G Mod. 21-Apr-11 21-Apr-11

Sample Id BM-53 SB27181-	lentification 33			<u>Project #</u> 01111		<u>Matrix</u> Paint	-	ection Date -Apr-11 15			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	95.2	1	SW846 8082A	21-Apr-11	23-Apr-11	IMR	1107125	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	95.2	1	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	95.2	1	"	"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	95.2	1	"	"	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	95.2	1	"	"	"	"	"	Х
11097-69-1	Aroclor-1254	9,910		μg/kg dry	95.2	1	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	95.2	1	"	"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	95.2	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	95.2	1	"	"	"	"	"	Х
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	76			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	123			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	98			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	112			30-150 %		"	"	"	"	"	
General C	hemistry Parameters											

% Solids

98.0

SM2540 G Mod. 21-Apr-11 21-Apr-11

Sample Io BM-54 SB27181-	elentification -34			<u>t Project #</u> 001111		<u>Matrix</u> Paint		ection Date -Apr-11 15			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	88.9	1	SW846 8082A	21-Apr-11	23-Apr-11	IMR	1107125	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	88.9	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	BRL		μg/kg dry	88.9	1	"	"	"	"	"	X
53469-21-9	Aroclor-1242	BRL		μg/kg dry	88.9	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	88.9	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	14,200		μg/kg dry	88.9	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	750		μg/kg dry	88.9	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	88.9	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	88.9	1	"	"	"	"	"	Χ
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	88			30-150 %		"	u u	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	18200	S02		30-150 %		п	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	111			30-150 %		"	"	"	"		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	140			30-150 %		"	"	"	"	"	
General C	hemistry Parameters											
	% Solids	98.1		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107165	

Sample Id BM-55 SB27181-	dentification 35			at Project # 001111		<u>Matrix</u> Paint		ection Date -Apr-11 16			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	85.0	1	SW846 8082A	21-Apr-11	23-Apr-11	IMR	1107125	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	85.0	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	BRL		μg/kg dry	85.0	1	"	"	"	"	"	X
53469-21-9	Aroclor-1242	BRL		μg/kg dry	85.0	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	85.0	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	12,100		μg/kg dry	85.0	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	500		μg/kg dry	85.0	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	85.0	1	"	"	"	"		Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	85.0	1	11	"	"	"	"	Χ
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	86			30-150 %		"	u u	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	87			30-150 %		п	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	125			30-150 %		"	"	"	"		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	94			30-150 %		"	"	"	"	"	
General C	hemistry Parameters											
	% Solids	97.8		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107165	

Sample Id BM-56 SB27181-	lentification 36			<u>nt Project #</u> 0001111		<u>Matrix</u> Paint		ection Date 2-Apr-11 16			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cerr
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082											
	by method SW846 3540C	•										
12674-11-2	Aroclor-1016	BRL		μg/kg dry	98.8	1	SW846 8082A	21-Apr-11	23-Apr-11	IMR	1107125	Χ
11104-28-2	Aroclor-1221	BRL		μg/kg dry	98.8	1	"	n n	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	98.8	1	"	"	"	"	"	Χ
53469-21-9	Aroclor-1242	BRL		μg/kg dry	98.8	1	"	"	u	"	"	Χ
12672-29-6	Aroclor-1248	BRL		μg/kg dry	98.8	1		"	"	"	"	Χ
11097-69-1	Aroclor-1254	481,000	E	μg/kg dry	98.8	1		"	"	"	"	Χ
11096-82-5	Aroclor-1260	BRL		μg/kg dry	98.8	1	"	n n	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	98.8	1	"	"	"	"		Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	98.8	1	"	"	"	"	"	Х
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	88			30-150 %			"	"		"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	86			30-150 %		"	u	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	101			30-150 %		"	"	"	"		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	74			30-150 %		"	"	"	"	"	
Re-analys	sis of Polychlorinated Biphenyls b	y SW846 8082	<u>G</u> S1									
	by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	9880	100	SW846 8082A	21-Apr-11	25-Apr-11	IMR	1107125	Χ
11104-28-2	Aroclor-1221	BRL		μg/kg dry	9880	100	"	II .	"	"	"	Χ
11141-16-5	Aroclor-1232	BRL		μg/kg dry	9880	100	"	"	"	"	"	Χ
53469-21-9	Aroclor-1242	BRL		μg/kg dry	9880	100	"	"	"	"	"	Χ
12672-29-6	Aroclor-1248	BRL		μg/kg dry	9880	100	"	"	u	"	"	Х
11097-69-1	Aroclor-1254	726,000		μg/kg dry	9880	100		"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	9880	100	"	n n	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	9880	100	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	9880	100	"	n n	"	"	"	Х
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	0	S01		30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	0	S01		30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	0	S01		30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	0	S01		30-150 %		"	"	"		"	
General C	hemistry Parameters											

Sample Identification

% Solids

94.6

SM2540 G Mod. 21-Apr-11 21-Apr-11 VK 1107165

BM-57	lentification			nt Project # 0001111		<u>Matrix</u> Paint	· · · · · · · · · · · · · · · · · · ·	ection Date -Apr-11 16			Apr-11	
SB27181-	37		10	,001111		1 ann	12	-Api-11 10	.21	10-	Арт-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	lle Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
	Aroclor-1016	BRL		μg/kg dry	101	1	SW846 8082A	21-Apr-11	23-Apr-11	IMR	1107125	Х
11104-28-2	Aroclor-1221	BRL		μg/kg dry	101	1	"	"	"	"		Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	101	1	"	"	"	"		Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	101	1	"	"	"	"		Χ
12672-29-6	Aroclor-1248	BRL		μg/kg dry	101	1	"	"	"	"		Х
11097-69-1	Aroclor-1254	727,000	E	μg/kg dry	101	1	"	"	"	"		Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	101	1		n n	"	"	"	Χ
37324-23-5	Aroclor-1262	BRL		μg/kg dry	101	1	"	u u	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	101	1	"	"	"	"	"	Χ
Surrogate r	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	97			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	121			30-150 %		"	u	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	82			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	73			30-150 %		"	"	"	"	"	
	sis of Polychlorinated Biphenyls by	/ SW846 8082	GS1									
	by method SW846 3540C											
	Aroclor-1016	BRL		μg/kg dry	20200	200	SW846 8082A	21-Apr-11	25-Apr-11	IMR	1107125	
11104-28-2	Aroclor-1221	BRL		μg/kg dry	20200	200	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	20200	200	"	"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	20200	200	"	"	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	20200	200	"	u u	"	"	"	Χ
11097-69-1	Aroclor-1254	1,420,000		μg/kg dry	20200	200	"	"	"	"	"	Χ
11096-82-5	Aroclor-1260	BRL		μg/kg dry	20200	200	"	"	"	"	"	Χ
37324-23-5	Aroclor-1262	BRL		μg/kg dry	20200	200	"	"	"	"	"	Χ
11100-14-4	Aroclor-1268	BRL		μg/kg dry	20200	200	"	"	"	"	"	Х
Surrogate r	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	0	S01		30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	0	S01		30-150 %		"	"	"	"	ıı	
2051-24-3	Decachlorobiphenyl (Sr)	0	S01		30-150 %		u u	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	0	S01		30-150 %			"	"	"	"	

95.2

General Chemistry Parameters
% Solids

SM2540 G Mod. 21-Apr-11 21-Apr-11

Sample Ic BM-58 SB27181-	dentification -38			<u>Project #</u> 01111		<u>Matrix</u> Paint		ection Date -Apr-11 16			ceived Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	79.3	1	SW846 8082A	21-Apr-11	23-Apr-11	IMR	1107125	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	79.3	1	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	79.3	1	"	"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	79.3	1	"	u u	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	79.3	1	"	"	"	"	"	Х
11097-69-1	Aroclor-1254	11,600		μg/kg dry	79.3	1	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	655		μg/kg dry	79.3	1	"	"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	79.3	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	79.3	1	"	"	•	"	"	Χ
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	77			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	108			30-150 %		u	n .	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	87			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	98			30-150 %		"	"	"	"	"	
General C	hemistry Parameters											

% Solids

95.6

SM2540 G Mod. 21-Apr-11 21-Apr-11

Sample Id BM-59 SB27181-	dentification -39		· ·	<u>Project #</u> 001111		Matrix Concrete	·	ection Date -Apr-11 17			eceived Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	54.7	1	SW846 8082A	20-Apr-11	21-Apr-11	IMR	1107089	Χ
11104-28-2	Aroclor-1221	BRL		μg/kg dry	54.7	1	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	54.7	1	"	"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	54.7	1	"	u u	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	54.7	1	"	"	"	"	"	Х
11097-69-1	Aroclor-1254	6,780		μg/kg dry	54.7	1	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	54.7	1	"	"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	54.7	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	54.7	1	"	"	"	"	"	Χ
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	94			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	122			30-150 %		u	n .	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	114			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	131			30-150 %		"	"	"	"	"	
General C	hemistry Parameters											

% Solids

99.5

SM2540 G Mod. 21-Apr-11 21-Apr-11

Sample Id BM-60 SB27181-	entification 40			at Project # 001111		Matrix Concret		ection Date -Apr-11 17			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	66.0	1	SW846 8082A	20-Apr-11	21-Apr-11	IMR	1107089	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	66.0	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	BRL		μg/kg dry	66.0	1	"	"	"	"	"	X
53469-21-9	Aroclor-1242	BRL		μg/kg dry	66.0	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	66.0	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	12,900		μg/kg dry	66.0	1	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	66.0	1	"	"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	66.0	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	66.0	1	"	"	"	"	"	Χ
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	97			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	116			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	122			30-150 %		"	"	"		"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	113			30-150 %			"	"	"	"	
General C	hemistry Parameters											
	% Solids	96.7		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107165	

Sample Id BM-61 SB27181-	lentification 41			at Project # 001111		<u>Matrix</u> Paint		ection Date -Apr-11 17			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	118	1	SW846 8082A	21-Apr-11	22-Apr-11	IMR	1107126	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	118	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	BRL		μg/kg dry	118	1	"	"	"	"	"	Χ
53469-21-9	Aroclor-1242	BRL		μg/kg dry	118	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	118	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	7,750		μg/kg dry	118	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	319		μg/kg dry	118	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	118	1	"	"	"	"		Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	118	1	11	"	"	"	"	Χ
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	101			30-150 %		"	u u	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	138			30-150 %		п	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	120			30-150 %		"	"	"	"		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	116			30-150 %		"	"	"	"	"	
General C	hemistry Parameters											
	% Solids	83.2		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107167	

<u>Polychlorii</u>	Analyte(s) le Organic Compounds by GC nated Biphenyls by SW846 8082 by method SW846 3540C Aroclor-1016	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzad	4		
<u>Polychlorii</u>	nated Biphenyls by SW846 8082 by method SW846 3540C						J -	cp cu	Anuiyzeu	Anaiyst	Batch	Cert.
	by method SW846 3540C											
Prepared	Aroclor-1016											
12674-11-2		BRL		μg/kg dry	98.9	1	SW846 8082A	21-Apr-11	22-Apr-11	IMR	1107126	Χ
11104-28-2	Aroclor-1221	BRL		μg/kg dry	98.9	1	"	"	u u	"	"	X
11141-16-5	Aroclor-1232	BRL		μg/kg dry	98.9	1	"	"	u u	"	"	X
53469-21-9	Aroclor-1242	BRL		μg/kg dry	98.9	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	98.9	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	9,730		μg/kg dry	98.9	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	252		μg/kg dry	98.9	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	98.9	1	"	"	"	"	"	X
11100-14-4	Aroclor-1268	BRL		μg/kg dry	98.9	1	II .	"	"	"	"	Χ
Surrogate r	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	86			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	113			30-150 %		"	"	n	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	126			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	138			30-150 %		"	"	"	"	"	
General Cl	nemistry Parameters											
	% Solids	90.8		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107167	

Sample Id BM-63 SB27181-	dentification 43			<u>t Project #</u> 001111		<u>Matrix</u> Paint		ection Date -Apr-11 17			eceived Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	142	1	SW846 8082A	21-Apr-11	22-Apr-11	IMR	1107126	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	142	1	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	142	1	"	"	"	"	"	Χ
53469-21-9	Aroclor-1242	BRL		μg/kg dry	142	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	142	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	BRL		μg/kg dry	142	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	BRL		μg/kg dry	142	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	142	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	142	1	"	n	"	"	"	Х
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	90			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	138			30-150 %		"	W	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	95			30-150 %		"	"	"		"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	101			30-150 %		"	"	"	"	"	
General C	hemistry Parameters											
	% Solids	67.3		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107167	

Sample Id BM-64 SB27181-	lentification 44			at Project # 001111		<u>Matrix</u> Paint		ection Date -Apr-11 17			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	lle Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	133	1	SW846 8082A	21-Apr-11	22-Apr-11	IMR	1107126	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	133	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	BRL		μg/kg dry	133	1	"	"	"	"	"	Χ
53469-21-9	Aroclor-1242	BRL		μg/kg dry	133	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	133	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	18,300		μg/kg dry	133	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	BRL		μg/kg dry	133	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	133	1	"	"	"	"		Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	133	1	"	"	"	"	"	Χ
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	92			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	85			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	97			30-150 %		"	"	"	"		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	95			30-150 %			"	"	"	"	
General C	hemistry Parameters											
	% Solids	73.6		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107167	

Sample Id BM-65	lentification			t Project #		Matrix		ection Date			ceived	
SB27181-	45		10	001111		Paint	12	2-Apr-11 18	3:05	16-	Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	95.6	1	SW846 8082A	21-Apr-11	22-Apr-11	IMR	1107126	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	95.6	1	"	"	"	"	"	Χ
11141-16-5	Aroclor-1232	BRL		μg/kg dry	95.6	1	"	"	"	"		Χ
53469-21-9	Aroclor-1242	BRL		μg/kg dry	95.6	1	"	u u	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	95.6	1	"	u u	"	"	"	Χ
11097-69-1	Aroclor-1254	62,100	E	μg/kg dry	95.6	1	"	u u	"	"	"	Χ
11096-82-5	Aroclor-1260	BRL		μg/kg dry	95.6	1	"	n n	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	95.6	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	95.6	1	"	"	··	"	"	X
Surrogate r	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	100			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	120			30-150 %		n .	W	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	103			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	101			30-150 %		"	"	"	"	"	
	sis of Polychlorinated Biphenyls b by method SW846 3540C	y SW846 808	<u>2</u> GS1									
12674-11-2	Aroclor-1016	BRL		μg/kg dry	956	10	SW846 8082A	21-Apr-11	25-Apr-11	IMR	1107126	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	956	10	"	"	"	"	"	Χ
11141-16-5	Aroclor-1232	BRL		μg/kg dry	956	10	"	u u	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	956	10	"	"	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	956	10	"	"	"	"	"	Х
11097-69-1	Aroclor-1254	66,400		μg/kg dry	956	10	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	956	10	"	"	"	"		Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	956	10		"	u	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	956	10	"	"	"	"	"	Х
Surrogate r	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	110			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	110			30-150 %		u	n .	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	95			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	95			30-150 %		"	"	"	"	"	
General C	hemistry Parameters											

Sample Identification

% Solids

100

SM2540 G Mod. 21-Apr-11 21-Apr-11

Sample Id BM-66 SB27181-	entification 46			<u>t Project #</u> 001111		<u>Matrix</u> Paint	· · · · · · · · · · · · · · · · · · ·	ection Date -Apr-11 18			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	93.1	1	SW846 8082A	21-Apr-11	22-Apr-11	IMR	1107126	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	93.1	1	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	93.1	1	"	"	"	"	"	Χ
53469-21-9	Aroclor-1242	BRL		μg/kg dry	93.1	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	93.1	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	13,700		μg/kg dry	93.1	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	673		μg/kg dry	93.1	1	"	"	"	"	"	Χ
37324-23-5	Aroclor-1262	BRL		μg/kg dry	93.1	1	"	"	"	"	"	X
11100-14-4	Aroclor-1268	BRL		μg/kg dry	93.1	1	п	II .	"	u	u	Χ
Surrogate r	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	99			30-150 %		"	"	u u	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	423	S02		30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	121			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	130			30-150 %		"	"	"	"	"	
General Cl	hemistry Parameters											
	% Solids	94.6		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107167	

Sample Id BM-67 SB27181-	lentification 47			<u>t Project #</u> 001111		<u>Matrix</u> Paint		ection Date -Apr-11 18			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	95.0	1	SW846 8082A	21-Apr-11	22-Apr-11	IMR	1107126	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	95.0	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	BRL		μg/kg dry	95.0	1	"	"	"	"	"	Χ
53469-21-9	Aroclor-1242	BRL		μg/kg dry	95.0	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	95.0	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	9,300		μg/kg dry	95.0	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	585		μg/kg dry	95.0	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	95.0	1	"	"	"	"		Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	95.0	1	11	"	"	"	"	Χ
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	106			30-150 %		"	u u	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	125			30-150 %		п	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	139			30-150 %		"	"	"	"		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	121			30-150 %		"	"	"	"	"	
General C	hemistry Parameters											
	% Solids	97.7		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107167	

Sample Id BM-68 SB27181-	entification 48			<u>t Project #</u> 001111		<u>Matrix</u> Paint		ection Date -Apr-11 18			ceived Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolatil	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	99.6	1	SW846 8082A	21-Apr-11	22-Apr-11	IMR	1107126	Х
11104-28-2	Aroclor-1221	BRL		μg/kg dry	99.6	1	"	"	"	"	"	Χ
11141-16-5	Aroclor-1232	BRL		μg/kg dry	99.6	1	"	"	"	"	"	Χ
53469-21-9	Aroclor-1242	BRL		μg/kg dry	99.6	1	"	"	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	99.6	1	"	"	"	"	"	Х
11097-69-1	Aroclor-1254	10,000		μg/kg dry	99.6	1	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	99.6	1	"	"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	99.6	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	99.6	1	"	II .	· ·	u	u	Х
Surrogate r	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	99			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	2000	S02		30-150 %		п	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	149			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	133			30-150 %		"	"	"	"	"	
General Cl	hemistry Parameters											
	% Solids	95.5		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107167	

BM-69	SB27181-49			t Project # 001111		<u>Matrix</u> Paint		ection Date -Apr-11 18			ceived Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	83.0	1	SW846 8082A	21-Apr-11	22-Apr-11	IMR	1107126	Х
11104-28-2	Aroclor-1221	BRL		μg/kg dry	83.0	1	"	"	u u	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	83.0	1	"	"	u u	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	83.0	1	"	"	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	83.0	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	10,800		μg/kg dry	83.0	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	BRL		μg/kg dry	83.0	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	83.0	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	83.0	1	"	II .	· ·	u	u	Χ
Surrogate r	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	60			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	20900	S02		30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	145			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	102			30-150 %		"	"	"	"	"	
General Cl	hemistry Parameters											
	% Solids	97.8		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107167	

BM-70	B27181-50			<u>t Project #</u> 001111		<u>Matrix</u> Paint		ection Date -Apr-11 18			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	104	1	SW846 8082A	21-Apr-11	22-Apr-11	IMR	1107126	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	104	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	BRL		μg/kg dry	104	1	"	"	"	"	"	Χ
53469-21-9	Aroclor-1242	BRL		μg/kg dry	104	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	104	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	12,700		μg/kg dry	104	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	863		μg/kg dry	104	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	104	1	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	104	1	"	"	"	"	"	Χ
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	86			30-150 %		"	u u	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	20800	S02		30-150 %		п	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	116			30-150 %		"	"	"	"		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	107			30-150 %		"	"	"	"	"	
General C	hemistry Parameters											
	% Solids	95.0		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107167	

BM-71	SB27181-51			nt Project # 0001111		<u>Matrix</u> Paint		ection Date -Apr-11 17			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	99.1	1	SW846 8082A	21-Apr-11	22-Apr-11	IMR	1107126	Χ
11104-28-2	Aroclor-1221	BRL		μg/kg dry	99.1	1	"	"	"	"	"	Χ
11141-16-5	Aroclor-1232	BRL		μg/kg dry	99.1	1	"	"	"	"	"	Χ
53469-21-9	Aroclor-1242	BRL		μg/kg dry	99.1	1	"	u u	"	"		Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	99.1	1	"	"	"	"		Х
11097-69-1	Aroclor-1254	2,320		μg/kg dry	99.1	1	"	"	"	"		Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	99.1	1	"	"	"	"		Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	99.1	1	"	"	"	"		Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	99.1	1	"	"	"	"	"	Х
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	77			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	3640	S02		30-150 %		u	n .	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	91			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	98			30-150 %		"	"	u	"	"	
General C	hemistry Parameters											

98.8

% Solids

SM2540 G Mod. 21-Apr-11 21-Apr-11

BM-72	SB27181-52			nt Project # 0001111		<u>Matrix</u> Paint		ection Date -Apr-11 17			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	103	1	SW846 8082A	21-Apr-11	22-Apr-11	IMR	1107126	Χ
11104-28-2	Aroclor-1221	BRL		μg/kg dry	103	1	"	"	"	"	"	Χ
11141-16-5	Aroclor-1232	BRL		μg/kg dry	103	1	"	"	"	"	"	Χ
53469-21-9	Aroclor-1242	BRL		μg/kg dry	103	1	"	u u	"	"		Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	103	1	"	"	"	"		Х
11097-69-1	Aroclor-1254	2,360		μg/kg dry	103	1	"	"	"	"		Х
11096-82-5	Aroclor-1260	672		μg/kg dry	103	1	"	"	"	"		Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	103	1	"	"	"	"		Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	103	1	"	"	"	"	"	Х
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	85			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	1870	S02		30-150 %		u	n .	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	100			30-150 %		"	"	u	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	104			30-150 %		"	"	u	"	"	
General C	hemistry Parameters											

94.4

% Solids

SM2540 G Mod. 21-Apr-11 21-Apr-11

BM-73	SB27181-53		<u>Client Project #</u> 10001111	<u>!</u>	<u>Matrix</u> Paint		ection Date Apr-11 19			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC										
	nated Biphenyls by SW846 8082 by method SW846 3540C										
12674-11-2	Aroclor-1016	BRL	μg/kg dry	91.6	1	SW846 8082A	21-Apr-11	22-Apr-11	IMR	1107126	Χ
11104-28-2	Aroclor-1221	BRL	μg/kg dry	91.6	1	"	"	"		"	Х
11141-16-5	Aroclor-1232	BRL	μg/kg dry	91.6	1	"	"	"		"	Х
53469-21-9	Aroclor-1242	BRL	μg/kg dry	91.6	1	"	"	"	"		Х
12672-29-6	Aroclor-1248	BRL	μg/kg dry	91.6	1		"	"	"		Х
11097-69-1	Aroclor-1254	BRL	μg/kg dry	91.6	1		"	"	"		Х
11096-82-5	Aroclor-1260	BRL	μg/kg dry	91.6	1		"	"	"		Х
37324-23-5	Aroclor-1262	BRL	μg/kg dry	91.6	1	"	"	"	"		Х
11100-14-4	Aroclor-1268	BRL	μg/kg dry	91.6	1	"	"	"	"	"	Χ
Surrogate	recoveries:										
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	92		30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	117		30-150 %		u	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	125		30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	117		30-150 %		"	"	"	"	"	
General C	hemistry Parameters										

99.7

% Solids

SM2540 G Mod. 21-Apr-11 21-Apr-11

Sample Id Dup-01	<u>lentification</u>			nt Project #		<u>Matrix</u> Paint		ection Date -Apr-11 11			eceived Apr-11	
SB27181-	-54		10			1 dilit	12	-/ t p1-11 11	. +0	10-	71p1-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	102	1	SW846 8082A	21-Apr-11	22-Apr-11	IMR	1107126	Χ
11104-28-2	Aroclor-1221	BRL		μg/kg dry	102	1	"	"	"	"	"	Χ
11141-16-5	Aroclor-1232	BRL		μg/kg dry	102	1	"	"	"	"	"	Χ
53469-21-9	Aroclor-1242	BRL		μg/kg dry	102	1	"	"	"	"	"	Χ
12672-29-6	Aroclor-1248	BRL		μg/kg dry	102	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	3,300		μg/kg dry	102	1	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	393		μg/kg dry	102	1	"	"	"	"	"	Χ
37324-23-5	Aroclor-1262	BRL		μg/kg dry	102	1	"	"	"	"		Χ
11100-14-4	Aroclor-1268	BRL		μg/kg dry	102	1	"	"	"	"	"	Χ
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	95			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	165	S02		30-150 %		n .	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	115			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	82			30-150 %		"	"	"	"	"	
General C	hemistry Parameters											
	% Solids	95.9		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107167	

Dup-02	B27181-55			at Project # 001111		<u>Matrix</u> Paint		ection Date -Apr-11 14			ceived Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	95.7	1	SW846 8082A	21-Apr-11	22-Apr-11	IMR	1107126	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	95.7	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	BRL		μg/kg dry	95.7	1	"	"	"	"	"	X
53469-21-9	Aroclor-1242	BRL		μg/kg dry	95.7	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	95.7	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	17,300		μg/kg dry	95.7	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	941		μg/kg dry	95.7	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	95.7	1	"	"	"	"		Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	95.7	1	11	"	"	"	"	Χ
Surrogate r	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	86			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	84			30-150 %		n .	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	98			30-150 %		"	"	"		"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	108			30-150 %		"	"	"	"	"	
General Cl	nemistry Parameters											
	% Solids	94.7		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107167	

Sample Id Dup-03 SB27181-	entification 56			<u>t Project #</u> 001111		<u>Matrix</u> Paint		ection Date -Apr-11 18			ceived Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	101	1	SW846 8082A	21-Apr-11	22-Apr-11	IMR	1107126	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	101	1	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	101	1	"	"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	101	1	"	"	"	"	"	Χ
12672-29-6	Aroclor-1248	BRL		μg/kg dry	101	1	"	"	"	"	"	Χ
11097-69-1	Aroclor-1254	10,300		μg/kg dry	101	1	"	"	"	"	"	Χ
11096-82-5	Aroclor-1260	BRL		μg/kg dry	101	1	"	"	"	"	"	Χ
37324-23-5	Aroclor-1262	BRL		μg/kg dry	101	1	"	"	"	"	"	Χ
11100-14-4	Aroclor-1268	BRL		μg/kg dry	101	1	II .	"	"	"	"	Χ
Surrogate r	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	69			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	24500	S02		30-150 %		n .	u	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	147			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	138			30-150 %		"	"	"	"	"	
General Cl	hemistry Parameters											
	% Solids	98.5		%		1	SM2540 G Mod.	21-Apr-11	21-Apr-11	VK	1107167	

nalyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPI Limi
atch 1106909 - SW846 3540C										
Blank (1106909-BLK1)					Pre	epared: 19-	Apr-11 An	alyzed: 20-Ar	or-11	
Aroclor-1016	BRL		μg/kg wet	20.0			•			
Aroclor-1016 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1221	BRL		μg/kg wet	20.0						
Aroclor-1221 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1232	BRL		μg/kg wet	20.0						
Aroclor-1232 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1242	BRL		μg/kg wet	20.0						
Aroclor-1242 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1248	BRL		μg/kg wet	20.0						
Aroclor-1248 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1254	BRL		μg/kg wet	20.0						
Aroclor-1254 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1260	BRL		μg/kg wet	20.0						
Aroclor-1260 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1260 [20]	BRL		μg/kg wet	20.0						
	BRL			20.0						
Aroclor-1262 [2C] Aroclor-1268	BRL		μg/kg wet	20.0						
	BRL		μg/kg wet							
Aroclor-1268 [2C]			μg/kg wet	20.0						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	16.1		μg/kg wet		20.0		80	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	17.9		μg/kg wet		20.0		90	30-150		
Surrogate: Decachlorobiphenyl (Sr)	17.4		μg/kg wet		20.0		87	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	16.9		μg/kg wet		20.0		84	30-150		
LCS (1106909-BS1)					Pre	epared: 19-	Apr-11 An	alyzed: 20-Ap	or-11	
Aroclor-1016	244		μg/kg wet	20.0	250		98	50-140		
Aroclor-1016 [2C]	252		μg/kg wet	20.0	250		101	50-140		
Aroclor-1260	215		μg/kg wet	20.0	250		86	50-140		
Aroclor-1260 [2C]	214		μg/kg wet	20.0	250		86	50-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	21.3		μg/kg wet		20.0		107	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	22.1		μg/kg wet		20.0		111	30-150		
Surrogate: Decachlorobiphenyl (Sr)	22.1		μg/kg wet		20.0		111	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	19.9		μg/kg wet		20.0		100	30-150		
LCS Dup (1106909-BSD1)					Pre	epared: 19-	Apr-11 An	alyzed: 20-Ar	or-11	
Aroclor-1016	260		μg/kg wet	20.0	250	,	104	50-140	6	30
Aroclor-1016 [2C]	253		μg/kg wet	20.0	250		101	50-140	0.4	30
Aroclor-1260	231		μg/kg wet	20.0	250		92	50-140	7	30
Aroclor-1260 [2C]	207		μg/kg wet	20.0	250		83	50-140	3	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	21.0				20.0		105	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	20.0		μg/kg wet μg/kg wet		20.0		100			
, , , , , ,	20.0				20.0		112	30-150 30-150		
Surrogate: Decachlorobiphenyl (Sr)			μg/kg wet				102			
Surrogate: Decachlorobiphenyl (Sr) [2C]	20.3		μg/kg wet		20.0			30-150	4.4	
<u>Duplicate (1106909-DUP1)</u>	DDI		Source: SB		Pre		Apr-11 An	alyzed: 20-Ap	<u> 17-10</u>	40
Arcelor 1016	BRL		μg/kg dry	98.6		BRL				40
Aroclor-1016 [2C]	BRL		μg/kg dry	98.6		BRL				40
Aroclor-1221	BRL		μg/kg dry	98.6		BRL				40
Aroclor-1221 [2C]	BRL		μg/kg dry	98.6		BRL				40
Aroclor-1232	BRL		μg/kg dry	98.6		BRL				40
Aroclor-1232 [2C]	BRL		μg/kg dry 	98.6		BRL				40
Aroclor-1242	BRL		μg/kg dry	98.6		BRL				40
Aroclor-1242 [2C]	BRL		μg/kg dry	98.6		BRL				40
Aroclor-1248	BRL		μg/kg dry	98.6		BRL				40

nalyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
atch 1106909 - SW846 3540C										
<u>Duplicate (1106909-DUP1)</u>			Source: SB	27181-02	Pre	pared: 19-	Apr-11 Ana	alyzed: 20-A	pr-11	
Aroclor-1248 [2C]	BRL		μg/kg dry	98.6		BRL				40
Aroclor-1254	BRL		μg/kg dry	98.6		BRL				40
Aroclor-1254 [2C]	BRL		μg/kg dry	98.6		BRL				40
Aroclor-1260	BRL		μg/kg dry	98.6		BRL				40
Aroclor-1260 [2C]	BRL		μg/kg dry	98.6		BRL				40
Aroclor-1262	BRL		μg/kg dry	98.6		BRL				40
Aroclor-1262 [2C]	BRL		μg/kg dry	98.6		BRL				40
Aroclor-1268	BRL		μg/kg dry	98.6		BRL				40
Aroclor-1268 [2C]	BRL		μg/kg dry	98.6		BRL				40
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	67.6		μg/kg dry		98.6		68	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	84.3				98.6		86	30-150		
Surrogate: 4,4-DB-Octanuorobiphenyi (Sr) [20]	64.3 112		μg/kg dry		98.6		114	30-150 30-150		
, , ,			μg/kg dry							
Surrogate: Decachlorobiphenyl (Sr) [2C]	119		μg/kg dry		98.6		121	30-150		
Matrix Spike (1106909-MS1)			Source: SB					alyzed: 21-A	pr-11	
Aroclor-1016	2480	QM3	μg/kg dry	100	1260	BRL	197	40-135		
Aroclor-1016 [2C]	5240	QM3	μg/kg dry	100	1260	BRL	417	40-135		
Aroclor-1260	1150		μg/kg dry	100	1260	BRL	92	40-135		
Aroclor-1260 [2C]	1270		μg/kg dry	100	1260	BRL	101	40-135		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	76.8		μg/kg dry		100		77	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	20100	S02	μg/kg dry		100		20000	30-150		
Surrogate: Decachlorobiphenyl (Sr)	124		μg/kg dry		100		124	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	127		μg/kg dry		100		127	30-150		
Matrix Spike Dup (1106909-MSD1)			Source: SB	<u> 27181-14</u>	Pre	epared: 19-	Apr-11 Ana	alyzed: 21-A	pr-11	
Aroclor-1016	2800	QM3	μg/kg dry	94.7	1180	BRL	237	40-135	18	30
Aroclor-1016 [2C]	4270	QM3	μg/kg dry	94.7	1180	BRL	361	40-135	15	30
Aroclor-1260	1190		μg/kg dry	94.7	1180	BRL	101	40-135	9	30
Aroclor-1260 [2C]	1340		μg/kg dry	94.7	1180	BRL	113	40-135	12	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	78.1		μg/kg dry		94.7		82	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	18100	S02	μg/kg dry		94.7		19100	30-150		
Surrogate: Decachlorobiphenyl (Sr)	122		μg/kg dry		94.7		129	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	85.7		μg/kg dry		94.7		90	30-150		
atch 1107089 - SW846 3540C										
Blank (1107089-BLK1)					Pre	pared: 20-	Apr-11 An	alyzed: 21-A	pr-11	
Aroclor-1016	BRL		μg/kg wet	20.0		•	•			
Aroclor-1016 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1221	BRL		μg/kg wet	20.0						
Aroclor-1221 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1232	BRL		μg/kg wet	20.0						
Aroclor-1232 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1242	BRL		μg/kg wet	20.0						
Aroclor-1242 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1248	BRL		μg/kg wet	20.0						
Aroclor-1248 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1254	BRL		μg/kg wet	20.0						
Aroclor-1254 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1260	BRL		μg/kg wet	20.0						
Aroclor-1200 Aroclor-1260 [2C]	BRL		μg/kg wet μg/kg wet	20.0						
	BRL			20.0						
Aroclor-1262										
Aroclor-1262 Aroclor-1262 [2C]	BRL		μg/kg wet μg/kg wet	20.0						

nalyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limi
atch 1107089 - SW846 3540C										
Blank (1107089-BLK1)					Pre	epared: 20-	Apr-11 Ana	alyzed: 21-A	or-11	
Aroclor-1268 [2C]	BRL		μg/kg wet	20.0						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	19.8		μg/kg wet		20.0		99	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	22.7		μg/kg wet		20.0		114	30-150		
Surrogate: Decachlorobiphenyl (Sr)	23.0		μg/kg wet		20.0		115	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	22.8		μg/kg wet		20.0		114	30-150		
LCS (1107089-BS1)			13 3			enared: 20-		alyzed: 21-A	or-11	
Aroclor-1016	240		μg/kg wet	20.0	250	<u> </u>	96	50-140	<u> </u>	
Aroclor-1016 [2C]	244		μg/kg wet	20.0	250		98	50-140		
Aroclor-1260	232		μg/kg wet	20.0	250		93	50-140		
Aroclor-1260 [2C]	233		μg/kg wet	20.0	250		93	50-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	18.8		μg/kg wet		20.0		94	30-150		
	20.2		μg/kg wet		20.0		101	30-150		
Surrogate: Decachlorobiphenyl (Sr)	20.6		μg/kg wet		20.0		103 113	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	22.6		μg/kg wet		20.0			30-150		
LCS Dup (1107089-BSD1)	207			00.0		epared: 20-	•	alyzed: 21-A		
Aroclor-1016	237		μg/kg wet	20.0	250		95	50-140	1	30
Aroclor-1016 [2C]	244		μg/kg wet	20.0	250		98	50-140	0.04	30
Aroclor-1260	218		μg/kg wet	20.0	250		87	50-140	6	30
Aroclor-1260 [2C]	228		μg/kg wet	20.0	250		91	50-140	2	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	18.9		μg/kg wet		20.0		94	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	20.1		μg/kg wet		20.0		101	30-150		
Surrogate: Decachlorobiphenyl (Sr)	21.0		μg/kg wet		20.0		105	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	21.0		μg/kg wet		20.0		105	30-150		
<u>Duplicate (1107089-DUP1)</u>			Source: SB	<u> 27181-39</u>	Pre	epared: 20-	Apr-11 Ana	alyzed: 21-A	<u> pr-11</u>	
Aroclor-1016	BRL		μg/kg dry	60.1		BRL				40
Aroclor-1016 [2C]	BRL		μg/kg dry	60.1		BRL				40
Aroclor-1221	BRL		μg/kg dry	60.1		BRL				40
Aroclor-1221 [2C]	BRL		μg/kg dry	60.1		BRL				40
Aroclor-1232	BRL		μg/kg dry	60.1		BRL				40
Aroclor-1232 [2C]	BRL		μg/kg dry	60.1		BRL				40
Aroclor-1242	BRL		μg/kg dry	60.1		BRL				40
Aroclor-1242 [2C]	BRL		μg/kg dry	60.1		BRL				40
Aroclor-1248	BRL		μg/kg dry	60.1		BRL				40
Aroclor-1248 [2C]	BRL		μg/kg dry	60.1		BRL				40
Aroclor-1254	5150		μg/kg dry	60.1		6780			27	40
Aroclor-1254 [2C]	4950		μg/kg dry	60.1		6560			28	40
Aroclor-1260	BRL		μg/kg dry	60.1		BRL				40
Aroclor-1260 [2C]	BRL		μg/kg dry	60.1		BRL				40
Aroclor-1262	BRL		μg/kg dry	60.1		BRL				40
Aroclor-1262 [2C]	BRL		μg/kg dry	60.1		BRL				40
Aroclor-1268	BRL		μg/kg dry	60.1		BRL				40
Aroclor-1268 [2C]	BRL		μg/kg dry	60.1		BRL				40
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	45.4		μg/kg dry		60.1		76	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	56.5		μg/kg dry		60.1		94	30-150		
Surrogate: Decachlorobiphenyl (Sr)	50.2		μg/kg dry		60.1		83	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	53.8		μg/kg dry		60.1		90	30-150		
Matrix Spike (1107089-MS1)			Source: SB	27181-40		epared: 20-		alyzed: 21-A	pr-11	
Aroclor-1016	743		μg/kg dry	63.4	793	BRL	94	40-135		
Aroclor-1016 [2C]	789		μg/kg dry	63.4	793	BRL	100	40-135		
			,							

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1107089 - SW846 3540C										
Matrix Spike (1107089-MS1)			Source: SB	27181-40	<u>Pr</u>	epared: 20-	Apr-11 An	alyzed: 21-A	pr-11	
Aroclor-1260 [2C]	1320	QM1	μg/kg dry	63.4	793	BRL	167	40-135		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	58.0		μg/kg dry		63.4		92	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	60.6		μg/kg dry		63.4		96	30-150		
Surrogate: Decachlorobiphenyl (Sr)	69.7		μg/kg dry		63.4		110	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	67.5		μg/kg dry		63.4		107	30-150		
Matrix Spike Dup (1107089-MSD1)			Source: SB	27181-40		epared: 20-	Apr-11 An	alvzed: 21-A	pr-11	
Aroclor-1016	583		μg/kg dry	58.9	736	BRL	79	40-135	17	30
Aroclor-1016 [2C]	634		μg/kg dry	58.9	736	BRL	86	40-135	14	30
Aroclor-1260	942		μg/kg dry	58.9	736	BRL	128	40-135	29	30
Aroclor-1260 [2C]	1000	QM1	μg/kg dry	58.9	736	BRL	136	40-135	20	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	43.6		μg/kg dry		58.9		74	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	48.3		μg/kg dry		58.9		82	30-150		
Surrogate: Decachlorobiphenyl (Sr)	49.2		μg/kg dry		58.9		84	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	53.0		μg/kg dry		58.9		90	30-150		
Satch 1107125 - SW846 3540C	00.0		F9/119 41)		00.0			00 100		
Blank (1107125-BLK1)					Dr	oparod: 21	Anr 11 An	alyzed: 22-A	nr 11	
Aroclor-1016	BRL		μg/kg wet	20.0	<u>F1</u>	epareu. 21-	Api-11 Aii	aiyzeu. zz-A	<u> pi- i i</u>	
Aroclor-1016 [2C]	BRL		μg/kg wet μg/kg wet	20.0						
Aroclor-1221	BRL		μg/kg wet μg/kg wet	20.0						
Aroclor-1221 [2C]	BRL		μg/kg wet μg/kg wet	20.0						
Aroclor-1221 [20]	BRL		μg/kg wet μg/kg wet	20.0						
Aroclor-1232 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1242	BRL		μg/kg wet	20.0						
Aroclor-1242 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1248	BRL		μg/kg wet	20.0						
Aroclor-1248 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1254	BRL		μg/kg wet	20.0						
Aroclor-1254 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1260	BRL		μg/kg wet	20.0						
Aroclor-1260 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1262	BRL		μg/kg wet	20.0						
Aroclor-1262 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1268	BRL		µg/kg wet	20.0						
Aroclor-1268 [2C]	BRL		μg/kg wet	20.0						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	17.2		μg/kg wet		20.0		86	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	20.5				20.0		103	30-150		
Surrogate: Decachlorobiphenyl (Sr) [20]	20.5 19.2		μg/kg wet μg/kg wet		20.0		96	30-150 30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	21.2		μg/kg wet		20.0		106	30-150		
LCS (1107125-BS1)	21.2		Parka Mer			enared: 21		alyzed: 22-A	nr-11	
Aroclor-1016	235		μg/kg wet	20.0	250	cpaicu. Z I-	94	50-140	<u> </u>	
Aroclor-1016 [2C]	254		μg/kg wet μg/kg wet	20.0	250		102	50-140		
Aroclor-1010 [20]	230		μg/kg wet μg/kg wet	20.0	250		92	50-140		
Aroclor-1260 [2C]	230		μg/kg wet μg/kg wet	20.0	250		92 89	50-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	17.5		μg/kg wet		20.0		88	30-150 30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	18.2		μg/kg wet		20.0		91	30-150 30-150		
Surrogate: Decachlorobiphenyl (Sr)	19.9 18.0		μg/kg wet		20.0		100	30-150 30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	18.0		μg/kg wet		20.0		90	30-150	44	
LCS Dup (1107125-BSD1)	222			00.5		epared: 21-		alyzed: 22-A		
Aroclor-1016	222		μg/kg wet	20.0	250		89	50-140	6	30
Aroclor-1016 [2C]	236		μg/kg wet	20.0	250		94	50-140	7	30

nalyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
atch 1107125 - SW846 3540C										
LCS Dup (1107125-BSD1)					Pre	epared: 21-	Apr-11 Ana	alyzed: 22-A	pr-11	
Aroclor-1260	203		μg/kg wet	20.0	250		81	50-140	12	30
Aroclor-1260 [2C]	221		μg/kg wet	20.0	250		88	50-140	1	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	17.2		μg/kg wet		20.0		86	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	18.3		μg/kg wet		20.0		92	30-150		
Surrogate: Decachlorobiphenyl (Sr)	18.1		μg/kg wet		20.0		90	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	19.2		μg/kg wet		20.0		96	30-150		
<u>Duplicate (1107125-DUP1)</u>			Source: SB2	<u> 27181-38</u>	Pre	epared: 21-	Apr-11 Ana	alyzed: 22-A	<u>pr-11</u>	
Aroclor-1016	BRL		μg/kg dry	79.6		BRL				40
Aroclor-1016 [2C]	BRL		μg/kg dry	79.6		BRL				40
Aroclor-1221	BRL		μg/kg dry	79.6		BRL				40
Aroclor-1221 [2C]	BRL		μg/kg dry	79.6		BRL				40
Aroclor-1232	BRL		μg/kg dry	79.6		BRL				40
Aroclor-1232 [2C]	BRL		μg/kg dry	79.6		BRL				40
Aroclor-1242	BRL		μg/kg dry	79.6		BRL				40
Aroclor-1242 [2C]	BRL		μg/kg dry	79.6		BRL				40
Aroclor-1248	BRL		μg/kg dry	79.6		BRL				40
Aroclor-1248 [2C]	BRL		μg/kg dry	79.6		BRL				40
Aroclor-1254	11200		μg/kg dry	79.6		11400			2	40
Aroclor-1254 [2C]	11700		μg/kg dry	79.6		11600			2	40
Aroclor-1260	722		μg/kg dry	79.6		655			10	40
Aroclor-1260 [2C]	837		μg/kg dry	79.6		596			34	40
Aroclor-1262	BRL		μg/kg dry	79.6		BRL				40
Aroclor-1262 [2C]	BRL		μg/kg dry	79.6		BRL				40
Aroclor-1268	BRL		μg/kg dry	79.6		BRL				40
Aroclor-1268 [2C]	BRL		μg/kg dry	79.6		BRL				40
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	61.7		μg/kg dry		79.6		77	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	111		μg/kg dry		79.6		139	30-150		
Surrogate: Decachlorobiphenyl (Sr)	71.7		μg/kg dry		79.6		90	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	105		μg/kg dry		79.6		132	30-150		
Matrix Spike (1107125-MS1)			Source: SB2	<u> 27181-38</u>	Pre	epared: 21-	Apr-11 Ana	alyzed: 22-A	<u>pr-11</u>	
Aroclor-1016	896		μg/kg dry	73.6	920	BRL	97	40-135		
Aroclor-1016 [2C]	1020		μg/kg dry	73.6	920	BRL	111	40-135		
Aroclor-1260	1390		μg/kg dry	73.6	920	655	79	40-135		
Aroclor-1260 [2C]	1310		μg/kg dry	73.6	920	596	78	40-135		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	77.3		μg/kg dry		73.6		105	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	73.2		μg/kg dry		73.6		100	30-150		
Surrogate: Decachlorobiphenyl (Sr)	88.7		μg/kg dry		73.6		121	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	86.1		μg/kg dry		73.6		117	30-150		
Matrix Spike Dup (1107125-MSD1)			Source: SB2	27181-38	Pre	epared: 21-	Apr-11 Ana	alyzed: 22-A	pr-11	
Aroclor-1016	968		μg/kg dry	75.5	944	BRL	103	40-135	5	30
Aroclor-1016 [2C]	1020		μg/kg dry	75.5	944	BRL	108	40-135	3	30
Aroclor-1260	1340		μg/kg dry	75.5	944	655	72	40-135	10	30
Aroclor-1260 [2C]	1430		μg/kg dry	75.5	944	596	88	40-135	13	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	40.0		μg/kg dry		75.5		53	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	40.0		μg/kg dry		75.5		53	30-150		
Surrogate: Decachlorobiphenyl (Sr)	48.0		μg/kg dry		75.5		64	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	63.4		μg/kg dry μg/kg dry		75.5		84	30-150		
atch 1107126 - SW846 3540C	JU. 7		רשייש מיץ		, 0.0		٠.	23 ,00		
					Dr	anared: 21	Δnr_11 Δn/	alyzed: 22-A	nr_11	
Blank (1107126-BLK1) Aroclor-1016	BRL		μg/kg wet	20.0	<u> 110</u>	-μαι τ α. ∠ Ι-	API-II Alli	aiyzeu. zz-A	<u>ρι- Ι Ι</u>	

nalyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPI Limi
atch 1107126 - SW846 3540C										
Blank (1107126-BLK1)					Pre	epared: 21-	Apr-11 An	alyzed: 22-Ar	or-11	
Aroclor-1016 [2C]	BRL		μg/kg wet	20.0				-	<u>_</u>	
Aroclor-1221	BRL		μg/kg wet	20.0						
Aroclor-1221 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1232	BRL		μg/kg wet	20.0						
Aroclor-1232 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1242	BRL		μg/kg wet	20.0						
Aroclor-1242 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1248	BRL		μg/kg wet μg/kg wet	20.0						
Aroclor-1248 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1254	BRL		μg/kg wet μg/kg wet	20.0						
Aroclor-1254 [2C] Aroclor-1260	BRL		μg/kg wet	20.0						
	BRL		μg/kg wet	20.0						
Aroclor-1260 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1262	BRL		μg/kg wet	20.0						
Aroclor-1262 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1268	BRL		μg/kg wet	20.0						
Aroclor-1268 [2C]	BRL		μg/kg wet	20.0						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	17.4		μg/kg wet		20.0		87	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	20.2		μg/kg wet		20.0		101	30-150		
Surrogate: Decachlorobiphenyl (Sr)	19.1		μg/kg wet		20.0		96	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	20.5		μg/kg wet		20.0		103	30-150		
LCS (1107126-BS1)					Pre	epared: 21-	Apr-11 Ana	alyzed: 22-Ar	or-11	
Aroclor-1016	230		μg/kg wet	20.0	250		92	50-140		
Aroclor-1016 [2C]	247		μg/kg wet	20.0	250		99	50-140		
Aroclor-1260	207		μg/kg wet	20.0	250		83	50-140		
Aroclor-1260 [2C]	218		μg/kg wet	20.0	250		87	50-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	17.8		μg/kg wet		20.0		89	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	18.8		μg/kg wet		20.0		94	30-150		
Surrogate: Decachlorobiphenyl (Sr)	19.3		μg/kg wet μg/kg wet		20.0		96	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	21.2		μg/kg wet μg/kg wet		20.0		106	30-150		
	21.2		µg/kg wet						44	
LCS Dup (1107126-BSD1)						epared: 21-		alyzed: 22-Ar		
Aroclor-1016	241		μg/kg wet	20.0	250		96	50-140	5	30
Aroclor-1016 [2C]	253		μg/kg wet	20.0	250		101	50-140	3	30
Aroclor-1260	216		μg/kg wet	20.0	250		86	50-140	4	30
Aroclor-1260 [2C]	231		μg/kg wet	20.0	250		92	50-140	6	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	18.5		μg/kg wet		20.0		92	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	19.1		μg/kg wet		20.0		96	30-150		
Surrogate: Decachlorobiphenyl (Sr)	19.9		μg/kg wet		20.0		100	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	22.7		μg/kg wet		20.0		114	30-150		
<u>Duplicate (1107126-DUP1)</u>			Source: SB	27181-5 <u>4</u>	<u>Pre</u>	epared: 21-	Apr-11 Ana	alyzed: 22-Ar	or-11	
Aroclor-1016	BRL		μg/kg dry	103		BRL				40
Aroclor-1016 [2C]	BRL		μg/kg dry	103		BRL				40
Aroclor-1221	BRL		μg/kg dry	103		BRL				40
Aroclor-1221 [2C]	BRL		μg/kg dry	103		BRL				40
Aroclor-1232	BRL		μg/kg dry	103		BRL				40
Aroclor-1232 [2C]	BRL		μg/kg dry	103		BRL				40
Aroclor-1242	BRL		μg/kg dry	103		BRL				40
Aroclor-1242 [2C]	BRL		μg/kg dry	103		BRL				40
Aroclor-1242 [20] Aroclor-1248	BRL			103		BRL				40
			μg/kg dry							
Aroclor-1248 [2C]	BRL		μg/kg dry	103		BRL				40

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Maryte(s)	Kesuit	riag	Units	·KDL	Level	Resuit	70KEC	Lillius	KFD	Lillit
Batch 1107126 - SW846 3540C										
<u>Duplicate (1107126-DUP1)</u>			Source: SB	<u>27181-54</u>	Pre	epared: 21-	Apr-11 An	alyzed: 22-A	pr-11	
Aroclor-1254	3120		μg/kg dry	103		3300			6	40
Aroclor-1254 [2C]	3310		μg/kg dry	103		3080			7	40
Aroclor-1260	337		μg/kg dry	103		393			16	40
Aroclor-1260 [2C]	291		μg/kg dry	103		345			17	40
Aroclor-1262	BRL		μg/kg dry	103		BRL				40
Aroclor-1262 [2C]	BRL		μg/kg dry	103		BRL				40
Aroclor-1268	BRL		μg/kg dry	103		BRL				40
Aroclor-1268 [2C]	BRL		μg/kg dry	103		BRL				40
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	92.6		μg/kg dry		103		90	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	103		μg/kg dry		103		100	30-150		
Surrogate: Decachlorobiphenyl (Sr)	108		μg/kg dry		103		105	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	90.5		μg/kg dry		103		88	30-150		
Matrix Spike (1107126-MS1)			Source: SB	27181-54	Pre	epared: 21-	Apr-11 An	alyzed: 22-A	<u>pr-11</u>	
Aroclor-1016	1320		μg/kg dry	104	1300	BRL	102	40-135		
Aroclor-1016 [2C]	1320		μg/kg dry	104	1300	BRL	102	40-135		
Aroclor-1260	1450		μg/kg dry	104	1300	393	81	40-135		
Aroclor-1260 [2C]	1400		μg/kg dry	104	1300	345	81	40-135		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	108		μg/kg dry		104		105	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	120		μg/kg dry		104		116	30-150		
Surrogate: Decachlorobiphenyl (Sr)	128		μg/kg dry		104		123	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	123		μg/kg dry		104		119	30-150		
Matrix Spike Dup (1107126-MSD1)			Source: SB	<u> 27181-54</u>	Pre	epared: 21-	Apr-11 An	alyzed: 22-A	pr-11	
Aroclor-1016	1350		μg/kg dry	103	1290	BRL	105	40-135	3	30
Aroclor-1016 [2C]	1270		μg/kg dry	103	1290	BRL	99	40-135	3	30
Aroclor-1260	1360		μg/kg dry	103	1290	393	75	40-135	8	30
Aroclor-1260 [2C]	1390		μg/kg dry	103	1290	345	81	40-135	0.02	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	108		μg/kg dry		103		105	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	111		μg/kg dry		103		107	30-150		
Surrogate: Decachlorobiphenyl (Sr)	136		μg/kg dry		103		132	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	88.6		μg/kg dry		103		86	30-150		

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1107163 - General Preparation										
<u>Duplicate (1107163-DUP1)</u>			Source: SE	<u> 27181-01</u>	Pre	epared & Ai	nalyzed: 21	-Apr-11		
% Solids	96.5		%			96.9			0.4	20
Batch 1107165 - General Preparation										
<u>Duplicate (1107165-DUP1)</u>			Source: SE	27181-21	Pre	epared & Ai	nalyzed: 21	-Apr-11		
% Solids	94.6		%			94.1			0.5	20
Batch 1107167 - General Preparation										
<u>Duplicate (1107167-DUP1)</u>			Source: SE	27181-41	Pre	epared & Ai	-Apr-11			
% Solids	84.1		%			83.2		1	20	

Notes and Definitions

Ε The concentration indicated for this analyte is an estimated value. This value is considered an estimate (CLP E-flag). GS1 Sample dilution required for high concentration of target analytes to be within the instrument calibration range. QM1 The spike recovery for this QC sample is outside of established control limits due to sample matrix interference. QM3 Multiple analyses indicate the percent recovery exceeds the Quality Control acceptance criteria due to a matrix effect. S01 The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interference's. S02 The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract. BRL Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit dry Sample results reported on a dry weight basis

NR Not Reported

RPD Relative Percent Difference

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC.

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

> Validated by: Kimberly Wisk



CHAIN OF CUSTODY RECORD Page 1 of 6

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	Special Handling:

- ☐ Standard TAT 7 to 10 business days ☐ Rush TAT Date Needed: 5 day

 All TATs subject to laboratory approval.

 Min. 24-hour notification needed for rushes.

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	1	1	Relinquished by:	BM-30	Bm-29	Bm-28	B~-27	Bm- 26	BM-25	12-mg	Bm-23	Bm-22	BM-21	Sample Id:		G=Grab C=		Surface Water X2=	GW=G	9= Deioniz	2=HC1	Jedd Steinglas	207-756-2319	ok, ME 04092	Street	Associates	edd Steinglass
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☐ Ambient ☐ Iced ☐ Refrigerated ☐ Fridge temp.		E-mail to	☐ EDD Format PDF /								-				•				Analyses:		List preservative code below:	Sampler(s): USS/JBU		Location: Berwick	Site Name: Sullivan Sch	Project No.:	
Fridge temp°C		jsteinglass@credereLLC.com	ME EGAD	1										State-specific reporting standards:	Other TSCA TIER V*	v	□ Standard □ No QC □ DQA*	OA/OC Report: Yes No No	MA DEP MCP CAM Report: Yes No	* additional charges may apply	QA/QC Reporting Notes:			State: ME	School		



CHAIN OF CUSTODY RECORD

Special Handling: Standard TAT - 7 to 10 business days Rush TAT - Date Needed: 5 - day All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes. Samples disposed of after 60 days unless otherwise instructed.

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State-specific reporting standards:		30	# 0		Ma	Ту	Time:	Date:	Sample Id:	Lab Id:
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CT DPH RCP Report: Yes□ No□		•		5			idge A=Air	SO=Soil SL=Sludge	Surface Water	D =:
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QA/QC Reporting Notes:	List preservative code below:	List	7=CH ₃ OH		6=Ascorbic Acid	6=As	₃ 5=NaOH		$32O_3$ 2=HCl 3=H ₂ SO ₄	1=Na ₂ S2O ₃
	Sampler(s): USS/UBO	Sai	RQN:	R(o::	P.O. No.:)lass	Jedd Steinglas	Project Mgr.
	100							•	207-756-2319	Telephone #:
State: ME	Location: Berwick	Lo							ok, ME 04092	Westbrook,
School	Site Name: Sullivan Scl	Sit							n Street	776 Main
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Page 3 of 6

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Project No.:

 Samples disposed of after 60 days unless otherwise instructed. 	ter 60 days unless
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erwick	State: ME
JSS/JRO	

	FER C	1/2) Relir	1/30	62,	-28	127	92,	- 25	- 24	:23:	22.	7181-24	Lab Id:				XI= Paint	O=Oil SW=	DW=Drinking Water	$1=Na_2S2O_3$ $8=NaHSO_4$	Project Mgr.	rerephone #.	Talanhana #.	Westbrook,	776 Main	Credere	Report To: Jedd
		1.	Relinquished by:	Bm-50	Bm-49	84-48	ナトーかの	Bm-46	Bm-45	BM-44	Bm-43	Bm-42	Bm-41	Sample Id:		G=Grab C=(X2=	Surface V	g Water GW=Groundwater	0 ₃ 2=HCl 9= Deioniz	nedd preiiigias	1022 01 20 10 10 10 10 10 10 10 10 10 10 10 10 10	7 - 75	ok, ME 04092	n Street	Associates 1	fedd Steinglass
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Fridge temp°C		jsteinglass@credereLLC.com	ME EGAD	1							1			State-specific reporting standards:	Other TSCA	*	Standard No QC DQA*	QA/QC Reporting Level	CT DPH RCP Report: Yes□ No□	MA DEP MCP CAM Report: Yes□ No□	• Additional charges may apply			State: Till	State: MI	School		

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CUSTODY RECORD

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- All TAT's subject to laboratory approval.
 Min. 24-hour notification needed for rushes.

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MA DEP MCP CAM Report: Yes No	Analyses:			Containers:	Con			ro.		G	DW=Drinking Water
QA/QC Reporting Notes: * additional charges may apply	List preservative code below:	List 10		7=CH ₃ OH		6=Ascorbic Acid	6=Ascorb	3 5=NaOH	$_2SO_4$ 4=HNO ₃ rater 10= ICE	O_4 2=HCl 3=H ₂ SO ₄ O ₄ 9= Deionized Water	1=Na ₂ S2O ₃ 8= NaHSO ₄
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Zww.	## TOO / HDO	1								207-756-2319	Telephone #:
State: ME	Location: Berwick	100								ok, ME 04092	Westbrook,
School	Site Name: Sullivan So	Site								Street	776 Main
	Project No.: 11001111	Pro				me	o: Same	- Invoice To:	LLC	e Associates LLO	Report To:
otherwise instructed.	otherwis			6	101	rage				Featuring HANIBAL TECHNOLOGY	
Samples disposed of after 60 days unless	· Samples			-	t of	Dana (SPECTRUM ANALYTICAL, INC.	SPE



Report To: Jedd Steinglass

CHAIN OF CUSTODY RECO

	カフ		
· All TATs subject to laboratory approval.	型 Rush TAT - Date Needed: 5 - day	☐ Standard TAT - 7 to 10 business days	Special Handling:

otherwise instructed	Samples disposed of after 60 days unless	Min. 24-hour notification needed for rushes.

☐ Fridge temp °C ☐ Freezer temp °C	☐ Ambient ☐ Iced ☐ Refrigerated ☐ Fridge temp					C	0	(
		3.60	11:55 AM 3.60	6. 11	1.7.	1		2	X (T.
	⊠E-mail to jsteingl		(3:00	15/11	4		FEDEX	7	1	2
ME EGAD	■ EDD Format PDF /	Temp°C	Time:	Date:	I	d by:	Received by:		Relinquished by:	Relir
1		1		_	6	Sh:	6	4	B~ 70	1.50
		×		_		285	6		Bm-69	Sh.
		*		-		: 26	6		BM-68	35
		×		-		91:	6		おかったす	Ch-
		×		-		21:	6		Bm-66	38,
		*		-		:05	6		Bm-65	Sh.
		×		-		255	S		Bm-64	hr,
1		X		-		04:	2		Bm-63	.43
		×		-	_	+2:	2		BM-62	-42
		*		1	X	5:25 G	4/12/11 5	4/1	BM-61	1181 -41
Y Other TSCA State-specific reporting standards:		PCE		# of A	Type Matri	Time:	Date:		Sample Id:	Lab Id:
□ NY ASP A* □ NY ASP B* □ NJ Reduced* □ NJ Full*		40.	Clear C Plastic	PLA Amber	X		site	C=Composite	G=Grab C=	
☐ Standard ☐ No QC ☐ DQA*		ex	Glas	Gla						
OA/OC Report: Yes No		<u></u>	S	23 35		A=Air	SO=Soil SL=Sludge	0=Soil	Surface Water X2= (O=Oil SW= X1= Paint
MA DEP MCP CAM Report: Yes□ No□	Analyses:	-	Containers:	Cont		stewater	er WW=Wastewater	undwate	0	DW=Drinking Water
* additional charges may apply		10			11=		10= ICE	Water	9= Deioni	8= NaHSO ₄
QA/QC Reporting Notes:	List preservative code below:	Lis	7=CH ₃ OH		6=Ascorbic Acid	5=NaOH 6=		$3=H_2SO_4$	S2O ₃ 2=HCl	$1=Na_2S2O_3$
	Sampler(s): JSS/JBO	Sai		RQN:		P.O. No.:_	O	glass	Jedd Steinglas	Project Mgr.
								9	207-756-2319	Telephone #:
State: ME	Location: Berwick	10						10	ok, ME 04092	Westbrook,
hool	Site Name: Sullivan School	- Sit							n Street	776 Main
	Project No.: ++00++++	- Pro		-		THAOTEE TO:		LLC	Associates	Credere
	1100111	.			Same	Invoice To. Same		SSS	Jedd Steinglass	Report To: Jeda

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CHAIN OF CUSTODY RECOR

(J		
· All TATs subject to laboratory approval.	図 Rush TAT - Date Needed: 5 - day	☐ Standard TAT - 7 to 10 business days	Special Handling:

SPECTRUM ANALYTICAL, INC. Featuring HANIBAL TECHNOLOGY	Page 6 of 6	 Min. 24-hour notification needed for rushes. Samples disposed of after 60 days unless otherwise instructed.
Report To: Jedd Steinglass	Same	3
Credere Associates LLC	Involce 10:	Project No.:
776 Main Street		Site Name: Sullivan School
Westbrook, ME 04092		Location: Berwick State: ME
Telephone #: 207-756-2319		
Project Mgr. Jedd Steinglass	P.O. No.: RQN:	Sampler(s): USS/UBO
1=Na ₂ S2O ₃ 2=HCl 3=H ₂ SO ₄ 4=HNO ₃ 5=NaOH 6=Ascorbic Acid 7=CH ₃ OH		List preservative code below: QA/QC Reporting Notes:
C ST TICK C ST TOP		* additional above manufacture of the state

	The ex	711	Relinquished by:	1 56 Pup-03	10-07 SS DUP-02	10-00 HS.	53 Bm-73	. 52 Bm-72	14-mg 18-181	Lab Id: Sample Id:	G=Grab C=Co	X1= Paint X2= Concrete	Surface W	DW=Drinking Water GW=Groundwater
	8	REDEX	Rec	2				-	4/12/11	Date:	C=Composite	crete X3=	Soil SL=Slu	ter
	7	·/	Received by:	6:35	2:58	11:40	7:26	5:236	5,202	Time:			dge A=Air	WW=Wastewater
									Q	Туре				
	4.18	4/15	Date:	4					丛	Matrix # of V		vials	П	
	5.11	111	e:	-	-	-	-	_	1	# of A	UNC	Glass	-	Con
	1155AM 3.60	13:00	Time:			5	5	5	,	# of C	lastic	ilass 35 4 7		Containers:
	3.60		Temp°C		,		-					554		
☐ Ambient ☐ Iced ☐ Refrigerated ☐ Fridge temp		ŬE-mail to jstei	☑ EDD Format PDF											Analyses:
ted		19	/ ME EGAD	11811	per cuent ray					Y Other TSCA State-specific reporting standards:	*	QA/QC Reporting Level ☐ Standard ☐ No QC ☐ DQA*	CT DPH RCP Report: Yes□ No□	MA DEP MCP CAM Report: Yes□ No□

CO EXX . US Airbill 8652 3895 9244 8652 3895 4456 0200 520 fedex.com 1.800.GoFedEx 1.800.463.3339

Report Date: 11-May-11 11:36



☐ Final Report ☐ Re-Issued Report

Laboratory Report

Credere Associates, LLC 776 Main Street

Westbrook, ME 04092

Attn: Jedd Steinglass

Project: Sullivan School-Berwick, ME

Project #: 11001111

Laboratory ID	Client Sample ID	<u>Matrix</u>	Date Sampled	Date Received
SB27778-01	BM-74	Paint	26-Apr-11 12:50	29-Apr-11 12:00
SB27778-02	BM-75	Paint	26-Apr-11 12:55	29-Apr-11 12:00
SB27778-03	BM-76	Paint	26-Apr-11 13:00	29-Apr-11 12:00
SB27778-04	BM-77	Paint	26-Apr-11 13:11	29-Apr-11 12:00
SB27778-05	BM-78	Paint	26-Apr-11 13:16	29-Apr-11 12:00
SB27778-06	BM-79	Paint	26-Apr-11 13:42	29-Apr-11 12:00
SB27778-07	BM-80	Paint	26-Apr-11 13:58	29-Apr-11 12:00
SB27778-08	BM-81	Paint	26-Apr-11 14:21	29-Apr-11 12:00
SB27778-09	BM-82	Paint	26-Apr-11 14:30	29-Apr-11 12:00
SB27778-10	BM-83	Paint	26-Apr-11 14:45	29-Apr-11 12:00
SB27778-11	BM-84	Paint	26-Apr-11 14:55	29-Apr-11 12:00
SB27778-12	BM-85	Paint	26-Apr-11 14:59	29-Apr-11 12:00
SB27778-13	BM-86	Paint	26-Apr-11 15:02	29-Apr-11 12:00
SB27778-14	BM-87	Paint	26-Apr-11 15:05	29-Apr-11 12:00
SB27778-15	BM-88	Paint	26-Apr-11 15:25	29-Apr-11 12:00
SB27778-16	BM-89	Paint	26-Apr-11 15:33	29-Apr-11 12:00
SB27778-17	BM-90	Paint	26-Apr-11 15:40	29-Apr-11 12:00
SB27778-18	BM-91	Paint	26-Apr-11 16:12	29-Apr-11 12:00
SB27778-19	BM-92	Paint	26-Apr-11 16:20	29-Apr-11 12:00
SB27778-20	BM-93	Mastic	26-Apr-11 16:50	29-Apr-11 12:00
SB27778-21	Dup-04	Paint	26-Apr-11 14:30	29-Apr-11 12:00
SB27778-22	Dup-05	Paint	26-Apr-11 15:02	29-Apr-11 12:00

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.

All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110 Connecticut # PH-0777 Florida # E87600/E87936 Maine # MA138 New Hampshire # 2538 New Jersey # MA011/MA012 New York # 11393/11840 Pennsylvania # 68-04426/68-02924 Rhode Island # 98 USDA # S-51435



Authorized by:

Nicole Leja Laboratory Director

Nicole Leja

Spectrum Analytical holds certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes.

Please note that this report contains 38 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NY-11840, FL-E87936 and NJ-MA012).

CASE NARRATIVE:

The samples were received 5.2 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of \pm 2.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

SW846 8082 Case Narrative:

There were two sets of duplicate samples submitted for this work order: SB27778-09 and -21 were one set and SB27778-13 and -22 was the other. The detected concentrations did not correlate as duplicates.

With client authorization the remaining aliquot of each of the four samples were ground up and re-extracted. Samples SB27778-09 and -21 showed RPD values acceptable for duplicate samples. SB2778-13 and -22 did not. Both sets of data for each of the four samples is included.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

SW846 8082A

Duplicates:

1107867-DUP1 Source: SB27778-01

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

Samples:

SB27778-01 BM-74

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27778-02 *BM-75*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

Decachlorobiphenyl (Sr) [2C]

SB27778-03 *BM-76*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

Decachlorobiphenyl (Sr) [2C]

SB27778-04 *BM-77*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range

Samples:

SB27778-04 BM-77

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27778-05

BM-78

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SB27778-06

BM-79

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interference's.

4,4-DB-Octafluorobiphenyl (Sr)

4,4-DB-Octafluorobiphenyl (Sr) [2C]

Decachlorobiphenyl (Sr)

Decachlorobiphenyl (Sr) [2C]

SB27778-07

BM-80

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

Decachlorobiphenyl (Sr) [2C]

SB27778-08

BM-81

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

Decachlorobiphenyl (Sr) [2C]

SB27778-09RE1

BM-82

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

Decachlorobiphenyl (Sr)

Decachlorobiphenyl (Sr) [2C]

SB27778-09RE2

BM-82

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

Decachlorobiphenyl (Sr)

Decachlorobiphenyl (Sr) [2C]

SB27778-10

BM-83

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Samples:

SB27778-10 BM-83

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27778-11

BM-84

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27778-12

BM-85

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SB27778-13

BM-86

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SB27778-13RE1

BM-86

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

Decachlorobiphenyl (Sr)

Decachlorobiphenyl (Sr) [2C]

SB27778-14

BM-87

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SB27778-15

BM-88

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27778-16

BM-89

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27778-17

BM-90

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Samples:

SB27778-17 BM-90

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27778-18

BM-91

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

SB27778-19

BM-92

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SB27778-20

BM-93

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SB27778-21RE1

Dup-04

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

The concentration indicated for this analyte is an estimated value. This value is considered an estimate (CLP E-flag).

Aroclor-1254 [2C]

SB27778-21RE2

Dup-04

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SB27778-21RE3

Dup-04

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

4,4-DB-Octafluorobiphenyl (Sr) [2C]

Decachlorobiphenyl (Sr)

Decachlorobiphenyl (Sr) [2C]

SB27778-22

Dup-05

The concentration indicated for this analyte is an estimated value. This value is considered an estimate (CLP E-flag).

Aroclor-1254

SB27778-22RE1

Dup-05

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interference's.

4,4-DB-Octafluorobiphenyl (Sr)

4,4-DB-Octafluorobiphenyl (Sr) [2C]

Decachlorobiphenyl (Sr)

Decachlorobiphenyl (Sr) [2C]

SB27778-22RE2

Dup-05

Samples:

SB27778-22RE2 *Dup-05*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interference's.

4,4-DB-Octafluorobiphenyl (Sr)

4,4-DB-Octafluorobiphenyl (Sr) [2C]

Decachlorobiphenyl (Sr)

Decachlorobiphenyl (Sr) [2C]

<u>BM-74</u> SB27778-	lentification 01			nt Project #		<u>Matrix</u> Paint	·	ection Date 5-Apr-11 12			ceived Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C		GS1									
12674-11-2	Aroclor-1016	BRL		μg/kg dry	483	5	SW846 8082A	02-May-11	04-May-11	IMR	1107867	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	483	5		"	"	"		X
11141-16-5	Aroclor-1232	BRL		μg/kg dry	483	5		"	"	"		X
53469-21-9	Aroclor-1242	BRL		μg/kg dry	483	5		"	"	"	"	Χ
12672-29-6	Aroclor-1248	BRL		μg/kg dry	483	5		"	"	"		X
11097-69-1	Aroclor-1254	28,500		μg/kg dry	483	5		"	"	"		X
11096-82-5	Aroclor-1260	BRL		μg/kg dry	483	5		"	"	"	"	Χ
37324-23-5	Aroclor-1262	BRL		μg/kg dry	483	5		"	"	"		X
11100-14-4	Aroclor-1268	BRL		μg/kg dry	483	5	"	"	"	"	"	Χ
Surrogate r	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	100			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	6180	S02		30-150 %		"	"	u u	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	100			30-150 %		"	"	"	"	"	

30-150 %

%

2051-24-3

Decachlorobiphenyl (Sr) [2C]

General Chemistry Parameters % Solids 75

96.1

Sample Id BM-75 SB27778-	lentification 02			nt Project # .001111		<u>Matrix</u> Paint		ection Date 5-Apr-11 12			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C		GS1									
12674-11-2	Aroclor-1016	BRL		μg/kg dry	510	5	SW846 8082A	02-May-11	04-May-11	IMR	1107867	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	510	5		"	u	•	"	Χ
11141-16-5	Aroclor-1232	BRL		μg/kg dry	510	5		"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	510	5	"	u u	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	510	5	"	"	"	"	"	Х
11097-69-1	Aroclor-1254	34,300		μg/kg dry	510	5	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	510	5	"	u u	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	510	5	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	510	5	"	"	"	"	"	Χ
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	100			30-150 %		"	"	"	ıı	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	100			30-150 %		"	n .	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	125			30-150 %			"	"	"	"	

30-150 %

%

2051-24-3

Decachlorobiphenyl (Sr) [2C]

General Chemistry Parameters % Solids

200

96.8

S02

BM-76	SB27778-03			t Project # 001111		<u>Matrix</u> Paint		ection Date			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C		GS1									
12674-11-2	Aroclor-1016	BRL		μg/kg dry	504	5	SW846 8082A	02-May-11	04-May-11	IMR	1107867	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	504	5	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	504	5	"	"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	504	5	"	"	"		"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	504	5		n .	"	"	"	Х
11097-69-1	Aroclor-1254	42,300		μg/kg dry	504	5		n .	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	504	5		"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	504	5	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	504	5	"	"	"	"	"	Х
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	100			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	125			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	125			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	200	S02		30-150 %		"	w w	"	"	"	
General C	hemistry Parameters											

% Solids

95.8

<u>Sample 10</u> BM-77	<u>dentification</u>		Clien	nt Project #		Matrix	Colle	ection Date	/Time	Re	ceived	
SB27778	-04		11	001111		Paint	26	5-Apr-11 13	:11	29-	Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolat	ile Organic Compounds by GC											
-	hated Biphenyls by SW846 8082 by method SW846 3540C		GS1									
12674-11-2	Aroclor-1016	BRL		μg/kg dry	478	5	SW846 8082A	02-May-11	04-May-11	IMR	1107867	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	478	5	"	"	"	"	"	Χ
11141-16-5	Aroclor-1232	BRL		μg/kg dry	478	5	"	"	"	"	"	Χ
53469-21-9	Aroclor-1242	BRL		μg/kg dry	478	5	"	"	"	"	"	Χ
12672-29-6	Aroclor-1248	BRL		μg/kg dry	478	5	"	"	"	"	"	Х
11097-69-1	Aroclor-1254	23,700		μg/kg dry	478	5	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	478	5	"	"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	478	5	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	478	5	"	"	"	"	"	Χ
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	100			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	4830	S02		30-150 %		n .	u	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	100			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	100			30-150 %		"	"	"		"	

1

General Chemistry Parameters
% Solids

98.5

BM-78	B27778-05			<u>t Project #</u> 001111		<u>Matrix</u> Paint		ection Date 5-Apr-11 13			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Polychlorin	le Organic Compounds by GC nated Biphenyls by SW846 8082 by method SW846 3540C		GS1									
12674-11-2	Aroclor-1016	BRL		μg/kg dry	459	5	SW846 8082A	02-May-11	04-May-11	IMR	1107867	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	459	5	"	"	"	"		Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	459	5	"	"	"	"		Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	459	5	"	"	"	"	"	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	459	5	"	"	"	"	"	X
11097-69-1	Aroclor-1254	46,000		μg/kg dry	459	5	"	"	"	"	"	X
11096-82-5	Aroclor-1260	BRL		μg/kg dry	459	5	"	"	"	"	"	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	459	5	"	"	"	"	"	X
11100-14-4	Aroclor-1268	BRL		μg/kg dry	459	5	"	"	"	"	"	X
Surrogate re	ecoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	100			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	100			30-150 %		u u	n	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	125			30-150 %		"	"	"	"	"	

30-150 %

%

2051-24-3

Decachlorobiphenyl (Sr) [2C]

General Chemistry Parameters
% Solids

125

98.9

BM-79	327778-06			nt Project # 001111		<u>Matrix</u> Paint		ection Date -Apr-11 13			ceived Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C		GS1									
12674-11-2	Aroclor-1016	BRL		μg/kg dry	4820	50	SW846 8082A	02-May-11	05-May-11	IMR	1107867	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	4820	50	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	4820	50		"	"	"		Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	4820	50		"	u	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	4820	50		"	u	"	"	Х
11097-69-1	Aroclor-1254	247,000		μg/kg dry	4820	50	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	4820	50		"	u	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	4820	50	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	4820	50	"	"	"	"	"	Χ
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	0	S01		30-150 %		"	"	u u	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	0	S01		30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	0	S01		30-150 %			"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	0	S01		30-150 %			"	u	"	"	

General Chemistry Parameters
% Solids

98.5

BM-80	B27778-07			<u>t Project#</u> 001111		<u>Matrix</u> Paint		ection Date -Apr-11 13			ceived Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C		GS1									
12674-11-2	Aroclor-1016	BRL		μg/kg dry	501	5	SW846 8082A	02-May-11	04-May-11	IMR	1107867	Х
11104-28-2	Aroclor-1221	BRL		μg/kg dry	501	5	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	501	5	"	"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	501	5	"	n n	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	501	5	"	u u	"	"	"	Х
11097-69-1	Aroclor-1254	63,800		μg/kg dry	501	5	"	u u	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	501	5	"	u u	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	501	5	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	501	5	"	"	"	"	"	Χ
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	125			30-150 %		"	n n	"		"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	125			30-150 %		n .	"	"	u	"	
2051-24-3	Decachlorobiphenyl (Sr)	125			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	350	S02		30-150 %		"	"	"	"	"	

General Chemistry Parameters
% Solids

98.4

BM-81	B27778-08			<u>it Project #</u> 001111		<u>Matrix</u> Paint		ection Date -Apr-11 14			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	lle Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C		GS1									
12674-11-2	Aroclor-1016	BRL		μg/kg dry	492	5	SW846 8082A	02-May-11	04-May-11	IMR	1107867	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	492	5	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	492	5		"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	492	5	"	"	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	492	5	"	"	"	"		Х
11097-69-1	Aroclor-1254	110,000		μg/kg dry	492	5	"	"	"	"		Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	492	5	"	"	"	"		Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	492	5	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	492	5	"	"	"	"	"	Χ
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	100			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	125			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	100			30-150 %			"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	225	S02		30-150 %		"	"	"	"	"	

General Chemistry Parameters
% Solids

98.6

BM-82	lentification			nt Project # .001111		<u>Matrix</u> Paint		ection Date 5-Apr-11 14			<u>ceived</u> Apr-11	
SB27778- <i>CAS No.</i>	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.		Analyzed			Cor
		Resutt	Tiug	Chiis	KDL	Ditution	тетой кеј.	Ттеритеи	Anutyceu	Anutyst	Butch	
	le Organic Compounds by GC		_									
	sis of Polychlorinated Biphenyls b by method SW846 3540C	<u>y SW846 808</u>	<u>2</u>									
	Aroclor-1016	BRL		μg/kg dry	96.0	1	SW846 8082A	02-May-11	06-May-11	IMR	1108284	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	96.0	1	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	96.0	1	"	"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	96.0	1	"	"	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	96.0	1	"	"	"	"	"	Х
11097-69-1	Aroclor-1254	6,240		μg/kg dry	96.0	1	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	96.0	1	"	"	"	"		Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	96.0	1	"	"	"	"		Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	96.0	1	"	"	"	"	"	Х
Surrogate i	recoveries:			,								
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	80			30-150 %		"			"	"	
10386-84-2		2680	S02		30-150 %		u	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	225	S02		30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	200	S02		30-150 %		"	"	"	"	"	
Re-analys	sis of Polychlorinated Biphenyls b	y SW846 808	2									
	by method SW846 3540C	-										
12674-11-2	Aroclor-1016	BRL		μg/kg dry	92.1	1	SW846 8082A	09-May-11	10-May-11	SM	1108530	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	92.1	1	"	"	"	"	"	Χ
11141-16-5	Aroclor-1232	BRL		μg/kg dry	92.1	1	"	"	"	"	"	Χ
53469-21-9	Aroclor-1242	BRL		μg/kg dry	92.1	1	"	"	"	"	"	Χ
12672-29-6	Aroclor-1248	BRL		μg/kg dry	92.1	1	"	n n	"	"	"	Χ
11097-69-1	Aroclor-1254	9,040		μg/kg dry	92.1	1	"	n n	"	"	"	Χ
11096-82-5	Aroclor-1260	BRL		μg/kg dry	92.1	1	"	"	"	"	"	Χ
37324-23-5	Aroclor-1262	BRL		μg/kg dry	92.1	1	"	"	"	"	"	Χ
11100-14-4	Aroclor-1268	BRL		μg/kg dry	92.1	1	H .	"	"	"	"	Χ
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	90			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	5070	S02		30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	280	S02		30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	290	S02		30-150 %		"					

97.5

General Chemistry Parameters
% Solids

SB27778-	lentification			t Project # 001111		<u>Matrix</u> Paint		ection Date -Apr-11 14			Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C		GS1									
12674-11-2	Aroclor-1016	BRL		μg/kg dry	487	5	SW846 8082A	02-May-11	04-May-11	IMR	1107867	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	487	5	"	"	"	"	"	Χ
11141-16-5	Aroclor-1232	BRL		μg/kg dry	487	5	"	"	"	"	"	Χ
53469-21-9	Aroclor-1242	BRL		μg/kg dry	487	5	"	"	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	487	5	"	"	"	"	"	Х
11097-69-1	Aroclor-1254	5,330		μg/kg dry	487	5	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	487	5	"	"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	487	5	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	487	5	"	"	"	"	"	Χ
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	100			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	2030	S02		30-150 %		n .	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	100			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	125			30-150 %		"	"	"		"	

General Chemistry Parameters
% Solids

97.7

BM-84	dentification			t Project # 001111		<u>Matrix</u> Paint		ection Date			Apr. 11	
SB27778	-11		11	001111		Pallit	20	6-Apr-11 14	.33	29-	Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolat	ile Organic Compounds by GC											
Polychlori	inated Biphenyls by SW846 8082		GS1									
<u>Prepared</u>	by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	491	5	SW846 8082A	02-May-11	04-May-11	IMR	1107867	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	491	5	"	"	"	"	"	Χ
11141-16-5	Aroclor-1232	BRL		μg/kg dry	491	5	"	"	"		"	Χ
53469-21-9	Aroclor-1242	BRL		μg/kg dry	491	5	"	"	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	491	5	"	"	"	"		Х
11097-69-1	Aroclor-1254	5,350		μg/kg dry	491	5	"	"	"	"		Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	491	5	"	"	"	"		Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	491	5	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	491	5	п	"	"	"	"	Х
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	100			30-150 %		"	n n	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	1880	S02		30-150 %		"	"	"	"	ıı	
2051-24-3	Decachlorobiphenyl (Sr)	75			30-150 %		"	n n	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	125			30-150 %		"	"	"		"	

General Chemistry Parameters
% Solids

98.1

Sample Id BM-85 SB27778-	-12			nt Project # 001111		<u>Matrix</u> Paint		ection Date 5-Apr-11 14			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	inated Biphenyls by SW846 8082 by method SW846 3540C		GS1									
12674-11-2	Aroclor-1016	BRL		μg/kg dry	497	5	SW846 8082A	02-May-11	04-May-11	IMR	1107867	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	497	5	"	"	"	"	"	Χ
11141-16-5	Aroclor-1232	BRL		μg/kg dry	497	5	"	"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	497	5	"	"	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	497	5	"	"	"	"		Х
11097-69-1	Aroclor-1254	31,700		μg/kg dry	497	5	"	"	"	"		Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	497	5	"	"	"	"		Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	497	5	"	"	"	"	"	X
11100-14-4	Aroclor-1268	BRL		μg/kg dry	497	5	"	"	•	"	"	Χ
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	100			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	125			30-150 %		"	n	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	100			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	125			30-150 %		"	"	"	"	"	

General Chemistry Parameters
% Solids

96.3

Sample Id BM-86 SB27778-	dentification			t Project # 001111		<u>Matrix</u> Paint		ection Date 5-Apr-11 15			ceived Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C		GS1									
12674-11-2	Aroclor-1016	BRL		μg/kg dry	479	5	SW846 8082A	02-May-11	04-May-11	IMR	1107867	Х
11104-28-2	Aroclor-1221	BRL		μg/kg dry	479	5	"	"	"	"	"	X
11141-16-5	Aroclor-1232	BRL		μg/kg dry	479	5	"	"	"	"	"	X
53469-21-9	Aroclor-1242	BRL		μg/kg dry	479	5	"	"	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	479	5	"	"	"	"	"	Х
11097-69-1	Aroclor-1254	39,300		μg/kg dry	479	5	"	"	"	"	"	X
11096-82-5	Aroclor-1260	BRL		μg/kg dry	479	5	"	"	"	"	"	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	479	5	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	479	5	"	"	"	"	"	Χ
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	100			30-150 %		"	"	"	"		
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	100			30-150 %		u	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	100			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	100			30-150 %		"	"	"	"	"	
	sis of Polychlorinated Biphenyls by by method SW846 3540C	SW846 8082	GS1									
12674-11-2	Aroclor-1016	BRL		μg/kg dry	846	10	SW846 8082A	09-May-11	10-May-11	SM	1108530	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	846	10	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	846	10	"	"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	846	10	"	"	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	846	10	"	n n	II .	"	"	X
11097-69-1	Aroclor-1254	61,900		μg/kg dry	846	10	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	846	10	11	n n	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	846	10	11	n n	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	846	10	"	"	"	"	"	Χ

30-150 %

30-150 %

30-150 %

30-150 %

%

Surrogate recoveries:

[2C]

General Chemistry Parameters
% Solids

10386-84-2

2051-24-3

2051-24-3

10386-84-2 4,4-DB-Octafluorobiphenyl (Sr)

4,4-DB-Octafluorobiphenyl (Sr)

Decachlorobiphenyl (Sr)
Decachlorobiphenyl (Sr) [2C]

100

350

200

400

99.0

S02

S02

S02

Sample Id BM-87 SB27778-	lentification			<u>t Project #</u> 001111		<u>Matrix</u> Paint		ection Date			ceived Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C		GS1									
12674-11-2	Aroclor-1016	BRL		μg/kg dry	523	5	SW846 8082A	02-May-11	04-May-11	IMR	1107867	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	523	5	"	"	"	"	"	Χ
11141-16-5	Aroclor-1232	BRL		μg/kg dry	523	5	"	"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	523	5		"	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	523	5		n .	"	"	"	Х
11097-69-1	Aroclor-1254	4,400		μg/kg dry	523	5		n .	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	523	5		"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	523	5	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	523	5	"	"	"	"	"	Χ
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	125			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	125			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	100			30-150 %		"	w w	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	125			30-150 %		"	w w	"	"	"	
General C	hemistry Parameters											

% Solids

94.0

BM-88 SB27778	lentification			nt Project # 001111		<u>Matrix</u> Paint		ection Date 5-Apr-11 15			ceived Apr-11	
CAS No.	-13 Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prenared	Analyzed	Analyst	Ratch	Cert
	21maryre (3)	Resun	1 1115	Cittis	RDL	Dimiton	memou kej.	Ттеритей	21nuiy teu	21nuiysi	Duten	
Semivolat	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082		GS1									
<u>Prepared</u>	by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	462	5	SW846 8082A	02-May-11	04-May-11	IMR	1107867	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	462	5	"	II .	"	"	"	Χ
11141-16-5	Aroclor-1232	BRL		μg/kg dry	462	5	"	"	"	"	"	Χ
53469-21-9	Aroclor-1242	BRL		μg/kg dry	462	5	"	u u	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	462	5	"	"	"	"		Х
11097-69-1	Aroclor-1254	3,860		μg/kg dry	462	5	"	"	"	"		Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	462	5	"	"	"	"		Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	462	5	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	462	5	"	"	"	"	"	Χ
Surrogate I	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	75			30-150 %		"	u u	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	10100	S02		30-150 %		"	"	"	"	ıı	
2051-24-3	Decachlorobiphenyl (Sr)	125			30-150 %		"	n n	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	125			30-150 %			"	"		"	

General Chemistry Parameters
% Solids

99.5

Sample Ic BM-89 SB27778	lentification			t Project # 001111		<u>Matrix</u> Paint		ection Date -Apr-11 15			ceived Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C		GS1									
12674-11-2	Aroclor-1016	BRL		μg/kg dry	487	5	SW846 8082A	02-May-11	04-May-11	IMR	1107867	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	487	5	"	"	"	"	"	X
11141-16-5	Aroclor-1232	BRL		μg/kg dry	487	5	"	"	"	"	"	Χ
53469-21-9	Aroclor-1242	BRL		μg/kg dry	487	5	"	"	"	"		Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	487	5	"	"	"	"		Х
11097-69-1	Aroclor-1254	5,970		μg/kg dry	487	5	"	"	"	"		Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	487	5	"	"	"	"		Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	487	5	"	"	"	"		Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	487	5	"	"	"	"	"	Χ
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	100			30-150 %		"	"	"	"		
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	5980	S02		30-150 %		u	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	100			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	125			30-150 %		"	"	"	"	"	

General Chemistry Parameters
% Solids

99.8

Sample Id BM-90 SB27778-	lentification			nt Project # 001111		<u>Matrix</u> Paint		ection Date 6-Apr-11 15			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	nated Biphenyls by SW846 8082 by method SW846 3540C		GS1									
12674-11-2	Aroclor-1016	BRL		μg/kg dry	456	5	SW846 8082A	02-May-11	04-May-11	IMR	1107867	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	456	5	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	456	5	"	"	"	"		Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	456	5		"	"	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	456	5		"	"	"	"	Х
11097-69-1	Aroclor-1254	1,140		μg/kg dry	456	5		"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	456	5		"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	456	5	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	456	5	"	"	"	"	"	Χ
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	100			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	4730	S02		30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	100			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	150			30-150 %		"	"	"	"	"	
General C	hemistry Parameters											

% Solids

99.2

8M-91	<u>dentification</u>			t Project #		Matrix		ection Date		<u>Re</u>	ceived	
SB27778	-18		11	001111		Paint	26	6-Apr-11 16	:12	29-	Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolat	ile Organic Compounds by GC											
Polychlori	inated Biphenyls by SW846 8082		GS1									
<u>Prepared</u>	by method SW846 3540C											
12674-11-2	Aroclor-1016	BRL		μg/kg dry	482	5	SW846 8082A	02-May-11	04-May-11	IMR	1107867	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	482	5	"	"	"	"	"	Χ
11141-16-5	Aroclor-1232	BRL		μg/kg dry	482	5	"	"	"		"	Χ
53469-21-9	Aroclor-1242	BRL		μg/kg dry	482	5	"	"	"	"		Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	482	5	"	"		"		Х
11097-69-1	Aroclor-1254	6,710		μg/kg dry	482	5	"	"	"	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	482	5	"	"	"	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	482	5	"	"	"	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	482	5	п	"	"	"	"	Χ
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	100			30-150 %			u u	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	275	S02		30-150 %		"	"	"	"	ıı	
2051-24-3	Decachlorobiphenyl (Sr)	100			30-150 %		"	n n	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	125			30-150 %		"	"	"		"	

General Chemistry Parameters
% Solids

98.2

Sample Id BM-92 SB27778-	lentification			<u>t Project #</u> 001111		<u>Matrix</u> Paint		ection Date 5-Apr-11 16			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<u>Polychlori</u>	le Organic Compounds by GC nated Biphenyls by SW846 8082 by method SW846 3540C		GS1									
12674-11-2	Aroclor-1016	BRL		μg/kg dry	478	5	SW846 8082A	02-May-11	04-May-11	IMR	1107867	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	478	5	u u	"	u	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	478	5	"	"	"	"	"	X
53469-21-9	Aroclor-1242	BRL		μg/kg dry	478	5	"	"	u	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	478	5	"	"	u	"	"	Х
11097-69-1	Aroclor-1254	7,540		μg/kg dry	478	5	"	"	u	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	478	5	"	"	u	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	478	5	"	"	u	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	478	5	"	"	"	"	"	Х
Surrogate r	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	100			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	125			30-150 %		u u	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	100			30-150 %		"	"	"	"	"	

30-150 %

%

2051-24-3

Decachlorobiphenyl (Sr) [2C]

General Chemistry Parameters
% Solids

100

99.8

Sample Id BM-93 SB27778-	lentification 20			<u>t Project #</u> 001111		<u>Matrix</u> Mastic	· · · · · · · · · · · · · · · · · · ·	ection Date -Apr-11 16			<u>ceived</u> Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
<u>Polychlori</u>	le Organic Compounds by GC nated Biphenyls by SW846 8082		GS1									
12674-11-2	by method SW846 3540C Aroclor-1016	BRL		μg/kg dry	481	5	SW846 8082A	02-May-11	04-May-11	IMR	1107867	Х
11104-28-2	Aroclor-1221	BRL		μg/kg dry	481	5	u u	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	481	5	п	n n	"	"	"	X
53469-21-9	Aroclor-1242	BRL		μg/kg dry	481	5	п	n n	"	"	"	X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	481	5	"	"	"	"	"	Х
11097-69-1	Aroclor-1254	698		μg/kg dry	481	5	н	"	u u	"	"	Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	481	5	н	"	u u	"	"	Х
37324-23-5	Aroclor-1262	BRL		μg/kg dry	481	5	н	"	u u	"	"	Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	481	5	II	"	"	"	"	Х
Surrogate r	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	100			30-150 %		m m	"	"	"	"	

30-150 %

30-150 %

30-150 %

%

10386-84-2 4,4-DB-Octafluorobiphenyl (Sr)

Decachlorobiphenyl (Sr)

Decachlorobiphenyl (Sr) [2C]

[2C]

General Chemistry Parameters % Solids

2051-24-3

2051-24-3

125

100

125

99.7

Sample Id	<u>lentification</u>		Clier	nt Project#		Matrix	Coll	ection Date	/Time	Re	ceived	
Dup-04				.001111		Paint		6-Apr-11 14			Apr-11	
SB27778-	-21		11	.001111		Tuille	20	, , , , , , , , , , , , , , , , , , ,			 pr 11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	ile Organic Compounds by GC											
	sis of Polychlorinated Biphenyls by by method SW846 3540C	y SW846 8082	GS1									
12674-11-2	Aroclor-1016	BRL		μg/kg dry	99.7	1	SW846 8082A	04-May-11	05-May-11	IMR	1108143	Χ
11104-28-2	Aroclor-1221	BRL		μg/kg dry	99.7	1		"	"	"	"	X
11141-16-5	Aroclor-1232	BRL		μg/kg dry	99.7	1		"	"	"	"	X
53469-21-9	Aroclor-1242	BRL		μg/kg dry	99.7	1		"	u	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	99.7	1		"	"	"	"	Χ
11097-69-1	Aroclor-1254	37,500	E	μg/kg dry	99.7	1		"	"	"	"	X
11096-82-5	Aroclor-1260	BRL		μg/kg dry	99.7	1		"	"	"	"	Χ
37324-23-5	Aroclor-1262	BRL		μg/kg dry	99.7	1		"	"	"		Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	99.7	1	"	"	"	"	u u	Х
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	45			30-150 %			"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	55			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	50			30-150 %		"	"	"	ıı	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	50			30-150 %			"	"	"	"	
	sis of Polychlorinated Biphenyls by by method SW846 3540C	y SW846 8082	GS1									
12674-11-2	Aroclor-1016	BRL		μg/kg dry	997	10	SW846 8082A	04-May-11	06-May-11	IMR	1108143	Х
11104-28-2	Aroclor-1221	BRL		μg/kg dry	997	10	"	"	"	"	"	Χ
11141-16-5	Aroclor-1232	BRL		μg/kg dry	997	10	"	"	"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	997	10	"	"	"	"	"	Χ
12672-29-6	Aroclor-1248	BRL		μg/kg dry	997	10	"	"	"	"	"	Χ
11097-69-1	Aroclor-1254	41,100		μg/kg dry	997	10		"	"	"		Х
11096-82-5	Aroclor-1260	BRL		μg/kg dry	997	10		"	"	"	"	Χ
37324-23-5	Aroclor-1262	BRL		μg/kg dry	997	10		"	"	"		Х
11100-14-4	Aroclor-1268	BRL		μg/kg dry	997	10	"	"	"	"	"	X
Surrogate i	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	50			30-150 %			"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	50			30-150 %		"	II	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	50			30-150 %			"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	50			30-150 %		"	"	"	"	"	
	sis of Polychlorinated Biphenyls by by method SW846 3540C	y SW846 8082										
	Aroclor-1016	BRL		ua/ka dry	85.9	1	SW846 8082A	00-May-11	10-May-11	SM	1108530	Х
11104-28-2	Aroclor-1221	BRL		μg/kg dry μg/kg dry	85.9	1	"	"	"	UIVI "	"	X
11141-16-5	Aroclor-1232	BRL		μg/kg dry	85.9	1	"	"		"	"	X
53469-21-9	Aroclor-1242	BRL		μg/kg dry	85.9	1	"		"			X
12672-29-6	Aroclor-1248	BRL		μg/kg dry	85.9	1	"	"		"	"	X
11097-69-1	Aroclor-1254	9,440		μg/kg dry	85.9	1	"	"		"	"	X
11096-82-5	Aroclor-1260	BRL		μg/kg dry	85.9	1	"	"		"	"	X
37324-23-5	Aroclor-1262	BRL		μg/kg dry μg/kg dry	85.9	1	"	"		"	"	X
11100-14-4	Aroclor-1268	BRL		μg/kg dry	85.9	1	"	"	u.	"	"	X
Surrogata												
10386-84-2	recoveries: 4,4-DB-Octafluorobiphenyl (Sr)	80			30-150 %		"	"	u.	"	"	

Sample Id Dup-04 SB27778-	lentification 21			<u>Project #</u> 001111	:	<u>Matrix</u> Paint		ection Date -Apr-11 14			Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolati	le Organic Compounds by GC											
	sis of Polychlorinated Biphenyls by method SW846 3540C	by SW846 8082										
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	4880	S02		30-150 %		SW846 8082A	09-May-11	10-May-11	SM	1108530	
2051-24-3	Decachlorobiphenyl (Sr)	485	S02		30-150 %		"	"	u	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	295	S02		30-150 %		n n	"	u	"	"	
General C	hemistry Parameters											
	% Solids	98.6		%		1	SM2540 G Mod.	03-May-11	03-May-11	GMA	1108038	

	dentification .		Clier	nt Project#		Matrix	Coll	ection Date	/Time	Re	ceived	
Dup-05 SB27778-	-22		11	001111		Paint	26	5-Apr-11 15	5:02	29-	Apr-11	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Comivalati	ila Organia Compounds by CC											
	ile Organic Compounds by GC inated Biphenyls by SW846 8082											
	by method SW846 3540C											
	Aroclor-1016	BRL		μg/kg dry	98.2	1	SW846 8082A	02-Mav-11	04-May-11	SM	1107866	Х
11104-28-2	Aroclor-1221	BRL		μg/kg dry	98.2	1	"	"	"	"		Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	98.2	1	"	"	"	"		Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	98.2	1	"		"	"		Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	98.2	1						Х
11097-69-1	Aroclor-1254	168,000	E	μg/kg dry	98.2	1			"			Х
11096-82-5	Aroclor-1260	BRL	_		98.2	1	"	"	"	"		X
37324-23-5				μg/kg dry			"					
	Aroclor-1262	BRL		μg/kg dry	98.2	1	"					X
11100-14-4	Aroclor-1268	BRL		μg/kg dry	98.2	1						X
•	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	144			30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	103			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	108			30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	86			30-150 %			u u	u		"	
	sis of Polychlorinated Biphenyls b by method SW846 3540C	y SW846 8082	<u>2</u> GS1									
	Aroclor-1016	BRL		μg/kg dry	4910	50	SW846 8082A	02-Mav-11	04-May-11	SM	1107866	Х
11104-28-2	Aroclor-1221	BRL		μg/kg dry	4910	50	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	4910	50						Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	4910	50			"			X
12672-29-6	Aroclor-1248	BRL			4910	50	"	"				Х
11097-69-1	Aroclor-1254	245,000		μg/kg dry	4910	50	,,			,,		X
				μg/kg dry			,,					
11096-82-5	Aroclor-1260	BRL		μg/kg dry	4910	50						X
37324-23-5	Aroclor-1262	BRL		μg/kg dry	4910	50		"			"	X
11100-14-4	Aroclor-1268	BRL		μg/kg dry	4910	50	"	"	"			Х
Surrogate	recoveries:											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	0	S01		30-150 %		"	"	"		"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	0	S01		30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	0	S01		30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	0	S01		30-150 %		"	u u	"	"	"	
	sis of Polychlorinated Biphenyls b by method SW846 3540C	y SW846 8082	<u>2</u> GS1									
12674-11-2	·	BRL		μg/kg dry	4550	50	SW846 8082A	09-May-11	10-May-11	SM	1108530	X
11104-28-2	Aroclor-1221	BRL		μg/kg dry	4550	50	"	"	"	"	"	Х
11141-16-5	Aroclor-1232	BRL		μg/kg dry	4550	50			"	"	"	Х
53469-21-9	Aroclor-1242	BRL		μg/kg dry	4550	50	u	"	u	"	"	Х
12672-29-6	Aroclor-1248	BRL		μg/kg dry	4550	50	"			"	"	Х
11097-69-1	Aroclor-1254	179,000			4550	50	"			"	"	X
11096-82-5	Aroclor-1260	179,000 BRL		μg/kg dry	4550 4550		"	"	"	"	"	X
37324-23-5				μg/kg dry		50 50	"			"	"	
	Aroclor-1262	BRL		μg/kg dry	4550	50					"	X
11100-14-4	Aroclor-1268	BRL		μg/kg dry	4550	50	"	"		"		Х
_	recoveries:	0	504		20.452.87			"			"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	0	S01		30-150 %		"	"	"		"	

Sample Identification

Dup-05	Sample Identification Dup-05 SB27778-22			<u>Project #</u> 001111	<u>#</u>	<u>Matrix</u> Paint		Collection Date/Time 26-Apr-11 15:02			Received 29-Apr-11		
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.	
Semivolati	lle Organic Compounds by GC												
	sis of Polychlorinated Biphenyls by method SW846 3540C	by SW846 8082	GS1										
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	0	S01		30-150 %		SW846 8082A	09-May-11	10-May-11	SM	1108530		
2051-24-3	Decachlorobiphenyl (Sr)	0	S01		30-150 %		"	"	"	"	"		
2051-24-3	Decachlorobiphenyl (Sr) [2C]	0	S01		30-150 %		"	"	"	"	"		
General C	hemistry Parameters												
	% Solids	97.3		%		1	SM2540 G Mod.	03-May-11	03-May-11	GMA	1108038		

nalyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPI Lim
atch 1107866 - SW846 3540C										
Blank (1107866-BLK1)					Pre	epared: 02-l	May-11 Ar	nalyzed: 03-M	lay-11	
Aroclor-1016	BRL		μg/kg wet	20.0						
Aroclor-1016 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1221	BRL		μg/kg wet	20.0						
Aroclor-1221 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1232	BRL		μg/kg wet	20.0						
Aroclor-1232 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1242	BRL		μg/kg wet	20.0						
Aroclor-1242 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1248	BRL		μg/kg wet	20.0						
Aroclor-1248 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1254	BRL		μg/kg wet	20.0						
Aroclor-1254 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1260	BRL		μg/kg wet	20.0						
Aroclor-1260 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1262	BRL		μg/kg wet	20.0						
Aroclor-1262 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1268	BRL		μg/kg wet	20.0						
Aroclor-1268 [2C]	BRL		μg/kg wet	20.0						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	24.1		μg/kg wet	20.0	20.0		121	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	18.7		μg/kg wet		20.0		94	30-150		
Surrogate: Decachlorobiphenyl (Sr)	17.5		μg/kg wet		20.0		88	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	17.2		μg/kg wet		20.0		86	30-150		
	17.2		pg/kg wet			anarad: 02 I		nalyzed: 03-M	May 11	
LCS (1107866-BS1)	224		ua/ka wat	20.0		epareu. 02-i			<u>lay-11</u>	
Aroclor 1016 (2C)	224		μg/kg wet	20.0	250		90	50-140		
Aroclor-1016 [2C]	236		μg/kg wet	20.0	250		94	50-140		
Aroclor 1260	214		μg/kg wet	20.0	250		86 89	50-140		
Aroclor-1260 [2C]	221		μg/kg wet	20.0	250			50-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	20.5		μg/kg wet		20.0		103	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	18.5		μg/kg wet		20.0		92	30-150		
Surrogate: Decachlorobiphenyl (Sr)	17.8		μg/kg wet		20.0		89	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	17.2		μg/kg wet		20.0		86	30-150		
LCS Dup (1107866-BSD1)						epared: 02-l	-	nalyzed: 03-M	-	
Aroclor-1016	229		μg/kg wet	20.0	250		92	50-140	2	30
Aroclor-1016 [2C]	231		μg/kg wet	20.0	250		92	50-140	2	30
Aroclor-1260	218		μg/kg wet	20.0	250		87	50-140	1	30
Aroclor-1260 [2C]	218		μg/kg wet	20.0	250		87	50-140	1	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	20.4		μg/kg wet		20.0		102	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	18.3		μg/kg wet		20.0		92	30-150		
Surrogate: Decachlorobiphenyl (Sr)	17.7		μg/kg wet		20.0		88	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	17.1		μg/kg wet		20.0		86	30-150		
atch 1107867 - SW846 3540C										
Blank (1107867-BLK1)					Pre	epared: 02-l	May-11 Ar	nalyzed: 04-M	<u>1ay-11</u>	
Aroclor-1016	BRL		μg/kg wet	100						
Aroclor-1016 [2C]	BRL		μg/kg wet	100						
Aroclor-1221	BRL		μg/kg wet	100						
Aroclor-1221 [2C]	BRL		μg/kg wet	100						
Aroclor-1232	BRL		μg/kg wet	100						
Aroclor-1232 [2C]	BRL		μg/kg wet	100						
Aroclor-1242	BRL		μg/kg wet	100						
Aroclor-1242 [2C]	BRL		μg/kg wet	100						

nalyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPI Limi
tch 1107867 - SW846 3540C										
Blank (1107867-BLK1)					Pre	epared: 02-l	May-11 A	nalyzed: 04-N	1ay-11	
Aroclor-1248	BRL		μg/kg wet	100			•			
Aroclor-1248 [2C]	BRL		μg/kg wet	100						
Aroclor-1254	BRL		μg/kg wet	100						
Aroclor-1254 [2C]	BRL		μg/kg wet	100						
Aroclor-1260	BRL		μg/kg wet	100						
Aroclor-1260 [2C]	BRL		μg/kg wet	100						
Aroclor-1262	BRL		μg/kg wet	100						
Aroclor-1262 [2C]	BRL		μg/kg wet	100						
Aroclor-1268	BRL		μg/kg wet	100						
Aroclor-1268 [2C]	BRL		μg/kg wet	100						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	90.0		μg/kg wet		100		90	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	100		μg/kg wet		100		100	30-150		
Surrogate: Decachlorobiphenyl (Sr)	90.0		μg/kg wet		100		90	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	85.0		μg/kg wet		100		85	30-150		
LCS (1107867-BS1)	00.0		pg/kg wet			epared: 02-l		nalyzed: 04-N	lav 11	
Aroclor-1016	1200		μg/kg wet	100	1250	epareu. UZ-i	96	50-140	<u>lay-11</u>	
	1210			100	1250		96	50-140		
Aroclor-1016 [2C] Aroclor-1260	1140		μg/kg wet μg/kg wet	100	1250		91	50-140		
Aroclor-1200 Aroclor-1260 [2C]	1060		μg/kg wet μg/kg wet	100	1250		84	50-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	90.0		μg/kg wet		100		90	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	100		μg/kg wet		100		100	30-150		
Surrogate: Decachlorobiphenyl (Sr) Surrogate: Decachlorobiphenyl (Sr) [2C]	100 90.0		μg/kg wet		100 100		100 90	30-150 30-150		
	90.0		μg/kg wet						1 44	
LCS Dup (1107867-BSD1)	4000			400		epared: 02-r		nalyzed: 04-N		0.0
Aroclor-1016	1330		μg/kg wet	100	1250		106	50-140	11	30
Aroclor-1016 [2C]	1170		μg/kg wet	100	1250		94	50-140	3	30
Aroclor-1260	1190		μg/kg wet	100	1250		95	50-140	4	30
Aroclor-1260 [2C]	1050		μg/kg wet	100	1250		84	50-140	0.5	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	95.0		μg/kg wet		100		95	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	95.0		μg/kg wet		100		95	30-150		
Surrogate: Decachlorobiphenyl (Sr)	90.0		μg/kg wet		100		90	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	85.0		μg/kg wet		100		85	30-150		
Duplicate (1107867-DUP1)			Source: SB	27778-01	Pre	epared: 02-l	May-11 A	nalyzed: 04-N	<u>1ay-11</u>	
Aroclor-1016	BRL		μg/kg dry	509		BRL				40
Aroclor-1016 [2C]	BRL		μg/kg dry	509		BRL				40
Aroclor-1221	BRL		μg/kg dry	509		BRL				40
Aroclor-1221 [2C]	BRL		μg/kg dry	509		BRL				40
Aroclor-1232	BRL		μg/kg dry	509		BRL				40
Aroclor-1232 [2C]	BRL		μg/kg dry	509		BRL				40
Aroclor-1242	BRL		μg/kg dry	509		BRL				40
Aroclor-1242 [2C]	BRL		μg/kg dry	509		BRL				40
Aroclor-1248	BRL		μg/kg dry	509		BRL				40
Aroclor-1248 [2C]	BRL		μg/kg dry	509		BRL				40
Aroclor-1254	30200		μg/kg dry	509		28500			6	40
Aroclor-1254 [2C]	27000		μg/kg dry	509		25800			5	40
Aroclor-1260	BRL		μg/kg dry	509		BRL				40
Aroclor-1260 [2C]	BRL		μg/kg dry	509		BRL				40
Aroclor-1262	BRL		μg/kg dry	509		BRL				40
Aroclor-1262 [2C]	BRL		μg/kg dry	509		BRL				40
Aroclor-1268	BRL		μg/kg dry	509		BRL				40

nalyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limi
atch 1107867 - SW846 3540C										
Duplicate (1107867-DUP1)			Source: SB	27778-01	Pre	epared: 02-	May-11 Ar	nalyzed: 04-N	<u>1ay-11</u>	
Aroclor-1268 [2C]	BRL		μg/kg dry	509		BRL	-			40
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	102		μg/kg dry		102		100	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	4960	S02	μg/kg dry		102		4880	30-150		
Surrogate: Decachlorobiphenyl (Sr)	102		μg/kg dry		102		100	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	76.3		μg/kg dry		102		75	30-150		
atch 1108143 - SW846 3540C			F3···3 -··)							
Blank (1108143-BLK1)					Pre	enared: 04_	Mav-11 Δr	nalyzed: 05-N	/av-11	
Aroclor-1016	BRL		μg/kg wet	20.0	<u></u>	<u> </u>	ividy 11 74	iaryzou. oo n	10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Aroclor-1016 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1221	BRL		μg/kg wet	20.0						
Aroclor-1221 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1232	BRL		μg/kg wet	20.0						
Aroclor-1232 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1242	BRL		μg/kg wet	20.0						
Aroclor-1242 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1248	BRL		μg/kg wet	20.0						
Aroclor-1248 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1254	BRL		μg/kg wet	20.0						
Aroclor-1254 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1260	BRL		μg/kg wet	20.0						
Aroclor-1260 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1262	BRL		μg/kg wet	20.0						
Aroclor-1262 [2C]	BRL		μg/kg wet	20.0						
Aroclor-1268	BRL		μg/kg wet	20.0						
Aroclor-1268 [2C]	BRL		μg/kg wet	20.0						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	17.0		μg/kg wet		20.0		85	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	20.0		μg/kg wet		20.0		100	30-150		
Surrogate: Decachlorobiphenyl (Sr)	19.0		μg/kg wet		20.0		95	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	18.0		μg/kg wet		20.0		90	30-150		
LCS (1108143-BS1)					Pre	epared: 04-	May-11 Ar	nalyzed: 05-N	1ay-11	
Aroclor-1016	227		μg/kg wet	20.0	250		91	50-140		
Aroclor-1016 [2C]	231		μg/kg wet	20.0	250		92	50-140		
Aroclor-1260	212		μg/kg wet	20.0	250		85	50-140		
Aroclor-1260 [2C]	201		μg/kg wet	20.0	250		80	50-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	19.0		μg/kg wet		20.0		95	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	21.0		μg/kg wet		20.0		105	30-150		
Surrogate: Decachlorobiphenyl (Sr)	19.0		μg/kg wet		20.0		95	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	19.0		μg/kg wet		20.0		95	30-150		
LCS Dup (1108143-BSD1)			, 5 5			epared: 04-		nalyzed: 05-N	1av-11	
Aroclor-1016	224		μg/kg wet	20.0	250		90	50-140	1	30
Aroclor-1016 [2C]	232		μg/kg wet	20.0	250		93	50-140	0.4	30
Aroclor-1260	216		μg/kg wet	20.0	250		86	50-140	2	30
Aroclor-1260 [2C]	209		μg/kg wet	20.0	250		84	50-140	4	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	19.0				20.0		95	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	19.0 21.0		μg/kg wet μg/kg wet		20.0		95 105	30-150 30-150		
Surrogate: 4,4-DB-Octanuorobiphenyl (Sr) [2C] Surrogate: Decachlorobiphenyl (Sr)	21.0 19.0		μg/kg wet μg/kg wet		20.0		95	30-150 30-150		
Surrogate: Decachlorobiphenyl (Sr) Surrogate: Decachlorobiphenyl (Sr) [2C]	19.0 20.0		μg/kg wet μg/kg wet		20.0		95 100	30-150 30-150		
	20.0		pg/ng wet		20.0		700	55 750		
atch 1108284 - SW846 3540C					-		Mari 44 - 1	-l	444	
Blank (1108284-BLK1)					Pre	epared: 05-	ıvıay-11 Ar	nalyzed: 06-N	<u>ıay-11</u>	

nalyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPE Limi
atch 1108284 - SW846 3540C										
Blank (1108284-BLK1)					Pro	epared: 05-l	May-11 An	nalyzed: 06-N	/lay-11	
Aroclor-1016 [2C]	BRL		μg/kg wet	100		•	<u> </u>	,		
Aroclor-1221	BRL		μg/kg wet	100						
Aroclor-1221 [2C]	BRL		μg/kg wet	100						
Aroclor-1232	BRL		μg/kg wet	100						
Aroclor-1232 [2C]	BRL		μg/kg wet	100						
Aroclor-1242	BRL		μg/kg wet	100						
Aroclor-1242 [2C]	BRL		μg/kg wet	100						
Aroclor-1248	BRL		μg/kg wet	100						
Aroclor-1248 [2C]	BRL		μg/kg wet	100						
Aroclor-1254	BRL		μg/kg wet	100						
Aroclor-1254 [2C]	BRL		μg/kg wet	100						
Aroclor-1260	BRL		μg/kg wet	100						
Aroclor-1260 [2C]	BRL		μg/kg wet μg/kg wet	100						
Aroclor-1260 [20]	BRL		μg/kg wet μg/kg wet	100						
Aroclor-1202 Aroclor-1262 [2C]	BRL			100						
Aroclor-1268			μg/kg wet							
Aroclor-1268 [2C]	BRL BRL		μg/kg wet μg/kg wet	100 100						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	90.0		μg/kg wet		100		90	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	100		μg/kg wet		100		100	30-150		
Surrogate: Decachlorobiphenyl (Sr)	95.0		μg/kg wet		100		95	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	90.0		μg/kg wet		100		90	30-150		
LCS (1108284-BS1)	00.0		pg/go.			opared: 05 I		nalyzed: 06-N	1av 11	
Aroclor-1016	1150		ua/ka wet	100	1250	epareu. 03-i	92	50-140	<u>nay-11</u>	
			μg/kg wet							
Aroclor-1016 [2C] Aroclor-1260	1220 1070		μg/kg wet	100 100	1250 1250		97 86	50-140		
Aroclor-1260 [2C]	920		μg/kg wet μg/kg wet	100	1250		74	50-140 50-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	95.0		μg/kg wet		100		95	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	100		μg/kg wet		100		100	30-150		
Surrogate: Decachlorobiphenyl (Sr)	95.0		μg/kg wet μg/kg wet		100		95	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	100		μg/kg wet μg/kg wet		100		100	30-150		
	100		µg/kg wei						444	
LCS Dup (1108284-BSD1)	4400			400		epared: 05-1		nalyzed: 06-N		
Aroclor 1016 (2C)	1120		μg/kg wet	100	1250		90	50-140	3	30
Aroclor-1016 [2C]	1200		μg/kg wet	100	1250		96	50-140	1	30
Aroclor-1260	1030		μg/kg wet	100	1250		82	50-140	4	30
Aroclor-1260 [2C]	935		μg/kg wet	100	1250		75	50-140	2	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	95.0		μg/kg wet		100		95	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	100		μg/kg wet		100		100	30-150		
Surrogate: Decachlorobiphenyl (Sr)	90.0		μg/kg wet		100		90	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	95.0		μg/kg wet		100		95	30-150		
atch 1108530 - SW846 3540C										
Blank (1108530-BLK1)					<u>Pro</u>	epared: 09-l	May-11 An	nalyzed: 10-N	<u>//ay-11</u>	
Aroclor-1016	BRL		μg/kg wet	100						
Aroclor-1016 [2C]	BRL		μg/kg wet	100						
Aroclor-1221	BRL		μg/kg wet	100						
Aroclor-1221 [2C]	BRL		μg/kg wet	100						
Aroclor-1232	BRL		μg/kg wet	100						
Aroclor-1232 [2C]	BRL		μg/kg wet	100						
Aroclor-1242	BRL		μg/kg wet	100						
Aroclor-1242 [2C]	BRL		μg/kg wet	100						
Aroclor-1248	BRL		μg/kg wet	100						

nalyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
atch 1108530 - SW846 3540C										
Blank (1108530-BLK1)					Pre	epared: 09-M	1ay-11 A	nalyzed: 10-N	May-11	
Aroclor-1248 [2C]	BRL		μg/kg wet	100						
Aroclor-1254	BRL		μg/kg wet	100						
Aroclor-1254 [2C]	BRL		μg/kg wet	100						
Aroclor-1260	BRL		μg/kg wet	100						
Aroclor-1260 [2C]	BRL		μg/kg wet	100						
Aroclor-1262	BRL		μg/kg wet	100						
Aroclor-1262 [2C]	BRL		μg/kg wet	100						
Aroclor-1268	BRL		μg/kg wet	100						
Aroclor-1268 [2C]	BRL		μg/kg wet	100						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	65.0		μg/kg wet		100		65	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	75.0		μg/kg wet		100		75	30-150		
Surrogate: Decachlorobiphenyl (Sr)	60.0		μg/kg wet		100		60	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	80.0		μg/kg wet		100		80	30-150		
LCS (1108530-BS1)					Pre	epared: 09-M	1ay-11 A	nalyzed: 10-N	//ay-11	
Aroclor-1016	1220		μg/kg wet	100	1250		98	50-140		
Aroclor-1016 [2C]	1240		μg/kg wet	100	1250		99	50-140		
Aroclor-1260	1060		μg/kg wet	100	1250		85	50-140		
Aroclor-1260 [2C]	1140		μg/kg wet	100	1250		91	50-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	100		μg/kg wet		100		100	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	90.0		μg/kg wet		100		90	30-150		
Surrogate: Decachlorobiphenyl (Sr)	90.0		μg/kg wet		100		90	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	90.0		μg/kg wet		100		90	30-150		
LCS Dup (1108530-BSD1)					Pre	epared: 09-M	1ay-11 A	nalyzed: 10-N	//ay-11	
Aroclor-1016	1300		μg/kg wet	100	1250		104	50-140	6	30
Aroclor-1016 [2C]	1140		μg/kg wet	100	1250		91	50-140	9	30
Aroclor-1260	1070		μg/kg wet	100	1250		86	50-140	0.9	30
Aroclor-1260 [2C]	1010		μg/kg wet	100	1250		80	50-140	13	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	95.0		μg/kg wet		100		95	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	90.0		μg/kg wet		100		90	30-150		
Surrogate: Decachlorobiphenyl (Sr)	90.0		μg/kg wet		100		90	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	85.0		μg/kg wet		100		85	30-150		

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1108038 - General Preparation										
Duplicate (1108038-DUP1)			Source: SI	<u>327778-03</u>	Pre	epared & A	nalyzed: 03-	-May-11		
% Solids	95.1		%			95.8			8.0	20

Notes and Definitions

E The concentration indicated for this analyte is an estimated value. This value is considered an estimate (CLP E-flag).

GS1 Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

S01 The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration

and/or matrix interference's.

S02 The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic

compounds present in the sample extract.

BRL Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit

dry Sample results reported on a dry weight basis

NR Not Reported

RPD Relative Percent Difference

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC.

<u>Laboratory Control Sample (LCS)</u>: A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

<u>Matrix Spike</u>: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

<u>Method Blank</u>: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

<u>Surrogate</u>: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

<u>Continuing Calibration Verification:</u> The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

Validated by: June O'Connor Nicole Leja

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otherwise instructed	 Samples disposed of after 60 days unless 	· Min. 24-hour notification needed for rushe	 All TATs subject to laboratory approval. 	Rush TAT - Date Needed: 5/6	☐ Standard TAT - 7 to 10 business days	Special Handling:

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1	X	Received by:	A 54:2	2:30	12:21	1:53	1: 42	: 7	-: -	1:00	12:55	12:50 6	Time:			=Sludge A=Air	(CE) 11=	5=NaOH 6=Asc	P.O. No.:			- 40	Invoice To: Same	
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led ☐ Fridge temp °C ☐ Freezer temp °C	jsteinglass@credereLLC.com	/ ME EGAD											State-specific reporting standards:	□ NY ASP A* □ NY ASP B* □ NJ Reduced* □ NJ Full* □ TIED II* □ TIED V*	QA/QC Reporting Level ☐ Standard ☐ No QC ☐ DQA*	MA DEP MCP CAM Report: Yes No	adminorial charges may appry				State: ME	School		otherwise instructed.



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ist preservative code below: QA/QC Reporting Notes:	List	Н	7=CH ₃ OH		6=Ascorbic Acid	5=Asco	5=NaOH	SO ₄ 4=HNO ₃	$1=Na_2S2O_3$ $2=HC1$ $3=H_2SO_4$	l=Na
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] Fridge temp°C ☐ Freezer temp°C		jsteinglass@credereLLC.com	ME EGAD			7		~		State-specific reporting standards:	□ NY ASP A* □ NY ASP B* □ NJ Reduced* □ NJ Full*	QA/QC Reporting Level ☐ Standard ☐ No QC ☐ DQA*	CT DPH RCP Report: Yes□ No□	MA DEP MCP CAM Report: Yes□ No□	* additional charges may apply	OA/OC Reporting Notes:			State: ME	School		